

California GARDEN

COMPLIMENTARY

JULY-AUGUST 1989

One Dollar

Volume 80 No. 4

ISSN 0008-1116



Shirley Berry
8-14-88



Notes From An Older Flower Show Judge

By Martha Rosenberg
NCSGCI Master Judge

Flower show participants are inclined to view flower show judges in two different ways. Some exhibitors treat judges with great respect — even awe, while others express a certain amount of skepticism. Both are right, and both are wrong. Actually, we merit a nice blending of the two opinions.

We can command your respect because we have read and listened to many hours of information on all aspects concerning flower shows.

We have condensed this information in our own minds to a workable formula that we take with us to every flower show. This information becomes a part of us and when you think we are making a judgment too quickly, it is more likely that it is years of experience coming to our aid.

On the other hand, we are only human, and can occasionally make a mistake. Considering the number of exhibits we judge, this happens rarely. It isn't surprising that sometimes a detail is overlooked. Don't be too hard on us — we really try to be perfect.

To the outsider, judging seems like an easy job. I can assure you it is both emotionally and physically draining. It is also interesting and rewarding! Over the years it has been a pleasure to watch the progress garden clubs have made in their flower shows, and feel that maybe some of it is due to suggestions you have made.

Contrary to popular belief, we do not judge by "likes and dislikes". We judge strictly within the guidelines set down in our "Handbook For Flower Shows" written and published by the National Council of State Garden Clubs, Inc. The "Handbook" is up-dated and rewritten every few years so that new additions in horticulture and design are covered. This "Handbook" contains all the judging information a flower show judge needs providing she (or he) knows how to apply it. This knowledge is acquired about equally through training and experience.

The training starts with a Flower Show School. Ideally, the school is under the supervision of a local judges council. Conceivably it could be run by a garden club — but that is the hard way. A chairman and assistant chairman are in charge of the school and are locked into that position for two and a half years. Five three-day sessions



Southwestern Judges Council, San Diego, CA

six months apart and a comprehensive reading examination comprise the full course. The courses for Flower Show School fall into three categories: horticulture, design and flower show practice.

Instructors, approved by National Council, are brought in to teach these courses. At the end of the lectures a written examination is given.

After passing three courses, you become a Student Judge and are required to judge and exhibit in a specified number of flower shows. Point scoring is then added to your examination — which is the evaluation of exhibits using a scale of points for that particular exhibit. When you have passed the five courses, you are eligible for the final test — the Reading Examination covering all the required reading books as well as the "Handbook".

If you have made a passing grade in all the subjects, you get a judges certificate. This is a small white card with your name and date on which your judges' status becomes official. Memorize that date. Your life as a flower show judge begins and ends with that date.

It takes dedication to become a Flower Show Judge. You are committed to complete a definite program, and do as well as you can. You promise to continue learning and not rest on your judges' card. You also give your help to garden clubs when asked. You do what you can to help improve flower shows. Believe me when I say, again, that judging is both interesting and rewarding.

All of you garden clubs members and friends from plant societies are very lucky. A Flower Show School is being presented in San Diego, September 25 & 26, 1989 for your pleasure and education. The school is being sponsored by Palomar District of California Garden Clubs, Inc. and assisted by Southwestern Judges' Council. Most of the instructors for these courses will be from outside the San Diego area.

It is hoped that you will take advantage of this opportunity to broaden your gardening expertise and designing skills. We encourage many of you to become flower show judges — but attend the school for your own pleasure. It will have been well worth your time even if you attend only one session.



California GARDEN

SINCE 1909

San Diego Floral Association &
Garden Center

Casa del Prado, Balboa Park
San Diego, CA 92101-1619
Monday through Friday
10 a.m. to 12 and 1 to 3 p.m.
-5762

San Diego

SUBSCRIPTION FOR CALIFORNIA GARDEN ONLY

PUBLICATION

EDITOR

EDITORIAL

ASSOCIATE

Dr. Dona
Grace B
Skipper
Bill Gun
Barbara

PRODUCT

CONSULT

Dr. Geor
Dr. Willi
Dr. Don

STAFF WR

Penny B
Mary Lo
Harry T
Alison V
Tineke W

COORDIN

Advertis
Circulat

SALES REF

Dr. Dona

PRINTED B

Neyenes
2750 Ket
San Diego

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

PHONE () _____

FOR SUBSCRIPTION ONLY, CHECK HERE:

☐ 1 YEAR \$7.00 ☐ 2 YEARS \$13.00

DATE _____ AMOUNT ENCLOSED \$ _____

MEMBERSHIP TO SAN DIEGO FLORAL ASSOCIATION
(Includes subscription to *CALIFORNIA GARDEN*)

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

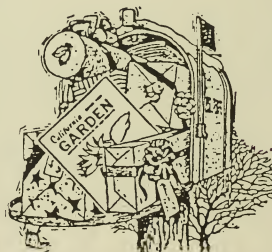
PHONE () _____

TYPE OF MEMBERSHIP _____

DATE _____ AMOUNT ENCLOSED \$ _____

TYPE OF MEMBERSHIP:

INDIVIDUAL/ FAMILY \$ 10.00
SUSTAINING 15.00
CONTRIBUTING 30.00
PROF. AFFILIATE 50.00
CLUB AFFILIATE 15.00
LIFE (10-YR MEMBER) 100.00
(5-YR MEMBER) 150.00
(UNDER 5-YR MEMBER) 200.00



GIVE CALIFORNIA GARDEN
TO A FRIEND AS A GIFT

NUMBER 4

tha Rosenberg
d Paul Mahalik
Tom Del Hotal
am E. Lovvorn
Bob Fenner
Francis Klein

rgaret Pethley

ny M. Jackson
Carol Roller

loom Gardens
Phyllis Bates

arry W. Tolen
Penny Bunker
Velma West

acher

Clarion Hotel,
10-9984. Send
ry, 2463 Easy

an be purchased for

h Baldwin Avenue,

Diego, CA 92103.

13.

CA 92101.

oom 105, Balboa

in Diego, CA 92110.

if you want to have

publication, is pub-
Association, Inc.,

Casa del Prado, Balboa Park, San Diego, CA 92101-1619, USA. Single copy is \$1.00. For foreign countries add \$3.00 for extra postage. Entered as second-class matter, December 8, 1910 at the Post Office in San Diego, California, under the Act of March 3, 1879. Second class postage paid at San Diego.

Manuscripts a
90-days prior
manuscripts an
will be handle
assume respon
All submission
and accompani
you expect the
Hortus Third
botanical nam
zine. All opinio
the authors an
fect the view
California Gard

Address all
CALIFORN
San Diego F
Casa del Pra
San Diego, C

Postmaster, Si
CALIFORNIA
Balboa Park, San Diego, CA 92101-1619



Published by
San Diego Floral Association
for 80 Years

California SINCE 1909 GARDEN

LIBRARY OF CONGRESS NO. ISSN 0008-1116

San Diego Floral Association &
Garden Center

Casa del Prado, Balboa Park
San Diego, CA 92101-1619
Monday through Friday
10 a.m. to 12 and 1 to 3 p.m.
(619) 232-5762

PUBLICATION STAFF

EDITOR

Elizabeth B. Glover

EDITOR EMERITUS

Althea Macdonald

ASSOCIATE EDITOR

Dr. Donald Boyer

Grace Boyer

Skipper Cope

Bill Gunther

Barbara Jones

PRODUCTION EDITOR

Pat Ziebarth

CONSULTANTS

Dr. Geogfrey Levin

Dr. William Nelson

Dr. Donald P. Watson

STAFF WRITERS

Penny Bunker

Mary Lou Orphey

Harry Tolen

Alison Voss

Tineke Wilders

COORDINATORS

Advertising — Jo Ann Gould

Circulation — Roy Jones

SALES REP

Dr. Donald Boyer 442-4242

PRINTED BY:

Neyenesch Printers, Inc.

2750 Kettner Blvd.

San Diego, CA 92101

Manuscripts are invited. Deadline is 90-days prior to publication date. All manuscripts and illustrations submitted will be handled carefully but we cannot assume responsibility for their safety. All submissions must be double spaced and accompanied by return postage, if you expect them to be returned to you. Hortus Third is the authority for all botanical names used in this magazine. All opinions expressed are those of the authors and do not necessarily reflect the views of the editors of the California Garden.

Address all editorial material to:

CALIFORNIA GARDEN

San Diego Floral Association

Casa del Prado, Balboa Park

San Diego, CA 92101-1619

Postmaster, Send change of address to:
CALIFORNIA GARDEN, Casa del Prado
Balboa Park, San Diego, CA 92101-1619

VOLUME 80

JULY—AUGUST 1989

NUMBER 4

- 98 NOTES FROM AN OLDER FLOWER SHOW JUDGE . . . Martha Rosenberg
103 ROBINSON CRUSOE ISLAND . . . Bill Gunther and Paul Mahalik
106 SOME RARE FRUIT FOR SAN DIEGO . . . Tom Del Hotal
108 WATER EFFICIENT PLANTS . . . William E. Lovvorn
110 REPAIRING CONCRETE WATER FEATURES . . . Bob Fenner
111 GUAVAS . . . B. Francis Klein
112 HISTORY OF THE GEORGE W. MARSTON HOME & GARDENS
Margaret Pethley
113 WHITE GARDEN SNAIL
114 GREEN THUMB, BROWN KNEES . . . Cathy M. Jackson
115 THE STARS OF THE GERANIUM GARDEN . . . Carol Roller
116 CULINARY HERB GARDEN FOR CONDO AND SMALL
BACKYARD GARDENS . . . Heirloom Gardens
118 FERNS OF THE SAN DIEGO ZOO . . . Phyllis Bates
120 OTHER GARDEN CLUBS
121 BOOK REVIEWS . . . Harry W. Tolen
122 NOW IS THE TIME . . . Compiled by Penny Bunker
125 FLORAL DESIGN — AN ART FORM . . . Velma West

COVER

Pachypodium Bispinosum by Shirley Berry, retired art teacher

AUGUST 3—6

American Begonia Society's Annual Convention and Plant Show at Clarion Hotel, San Francisco Airport, 401 East Millbrae Avenue, Millbrae, CA 94030-9984. Send reservations to Deborah Best, Convention Registrar, Begonias by the Bay, 2463 Easy St., San Leandro, CA 94578.

Single copies of the current issue of CALIFORNIA GARDEN magazine can be purchased for one dollar (\$1.00) each at the locations listed.

CALIFORNIA ARBORETUM FOUNDATION, Inc., 447-8207, 301 North Baldwin Avenue, Arcadia, CA 91006.

MISSION HILLS NURSERY, 295-2808, 1525 Fort Stockton Drive, San Diego, CA 92103.

OUCHI NURSERY, 263-6114, 5003 Imperial Avenue, San Diego, CA 92113.

PACIFIC TREE FARMS, 422-2400, 4301 Lynwood Drive, Chula Vista, CA 92010.

SAN DIEGO FLORAL GARDEN CENTER, 232-5762, Casa del Prado, Room 105, Balboa Park, San Diego, CA 92101-1619.

WALTER ANDERSEN NURSERY, 224-8271, 3642 Enterprise Street, San Diego, CA 92110.

FLOWER SHOWS: Show chairman contact California Garden, 232-5762 if you want to have it sold at your next flower show.

CALIFORNIA GARDEN (ISSN 0008-116) (USPS 084-020), a non-profit publication, is published bi-monthly for \$5.00 per year, or \$9.00 for two years, by San Diego Floral Association, Inc., Casa del Prado, Balboa Park, San Diego, CA 92101-1619, USA. Single copy is \$1.00. For foreign countries add \$3.00 for extra postage. Entered as second-class matter, December 8, 1910 at the Post Office in San Diego, California, under the Act of March 3, 1879. Second class postage paid at San Diego.

HORTICULTURE CALENDAR

**San Diego Floral Association Event*

***CONTEMPORARY FLOWER ARRANGING CLASSES AND BASKETRY CLASSES** sponsored by San Diego Floral Association are being scheduled this year. Call Marie Walsh, (619) 298-5182 to get on her mailing list for schedules, if interested in attending.

***FREE FLORAL CRAFTS INSTRUCTION WORK-SHOP** each Thursday 10-2 p.m. in San Diego Floral Library, Room 105, Casa del Prado, Balboa Park. If you are creative, and wish to participate, come each Thursday to Floral Office. Info: 232-5762.

OFFSHOOTOURS SPONSORS FREE plant walk of Balboa Park each Saturday. Meet at 10 a.m. in front of Botanical Lath House by the lily pond. No reservations required.

OFFSHOOTOURS SPONSORS FREE 2-hour walking botanical tour of the Zoo the last Sunday of each month beginning at 9:30 a.m. Free with paid admission or zoo membership. Reservations required in advance as space is limited to 25 people. Call Dale Ward at (619) 297-0289.

BRUCE ASAKAWA AND GARDEN LINE TALK SHOW - Sat. and Sun. Radio AM XTRA 690. 8-10 a.m.

"READY, SET, GROW" - TV Open House with Tineke Wilders. Sun. 10:30 a.m. KGTV Channel 10 ABC. 13 weeks of gardening tips.

June 16-July 4

1989 Del Mar Fair at Del Mar Fairgrounds. Spectacular Flower and Garden Show. The fair for Fair - "The World Is Our Garden". 10 a.m.-10 p.m.

June 17

California Rare Fruit Growers' Summer Meeting open to the public at Casa del Prado, Balboa Park, Room 101. Info: (619) 453-3321.

June 17-18

National Fuchsia Society's Show and Sale at Los Angeles State and County Arboretum, Arcadia. 9-4:30 p.m.

June 17-25

The Descanso Bonsai Society's Show and Sale at Descanso Gardens, La Canada Flintridge. 9-4:30 p.m. Demonstrations at 1 p.m. each Sat. and Sun.

June 18

Naturalist Jon Sherman will play his own music using a rhythm synthesizer, guitar and recorder at Descanso Garden, La Canada Flintridge. 2:30 p.m.

***June 20**

San Diego Floral Association Annual Meeting and Installation of Officers. Casa del Prado, Room 101, Balboa Park. Catered dinner, \$4 each, at 6 p.m. followed by meeting at 7:30 p.m. Bruce Asakawa will speak and have a question and answer period. Reservations (619) 232-5762.

June 22

Troubleshooting Seminar at UC Riverside Theatre sponsored by UC Cooperative Extension. Contact Hartley Bennett, P.O. Box 414, Wickenburg, AZ 85358 (602) 684-7308 for information.

June 24

Garden of Marston Home. Come join the San Diego Chapter of the American Revolution for an afternoon in the garden of the Marston Home, 3525 Seventh Avenue 2-4 p.m. Light refreshments. \$10.00 per person. Advance reservations required. Send to Alberta Dennstedt, 4372 Ridgeway, San Diego CA 92116.

June 24-25

San Diego Fuchsia and Shade Plant Show and Sale.

Casa del Prado, Room 101, Balboa Park. Free. Sat: 12-5 p.m.; Sun: 10-5 p.m.

June 24-25 Second Annual Summer-Showcase

sponsored by the Miniature Museum of San Diego at the Scottish Rite Center, 1895 Camino del Rio South. Sat: 10-5 p.m.; Sun: 11-5 p.m. Buyer and seller marketplace featuring miniatures, supplies, dolls, bears, and unusual wares. Admission \$3.50. Info: (619) 454-4959.

June 25

South Bay Bonsai Association's Bonsai Demonstration by Tom Meagher and Sherwin Aminimoto at South Coast Botanic Garden, Palos Verdes Peninsula. 2 p.m.

June 25

Women from Verdugo Hills Sweet Adeline Singers will perform barbershop quartet harmony sponsored by Descanso Gardens Guild. Descanso Gardens, La Canada Flintridge. 2:30 p.m.

July 2

Software in the Garden. Randy Farrar will demonstrate computer-aided gardening with a program called "Root Directory". This will simplify the search for a tree or flower of specific shape, size, and blooming characteristics. Free demo discs available. South Coast Botanic Garden, Palos Verdes Peninsula. 2 p.m.

July 2

San Diego Dahlia Society's Specimen Show. Casa del Prado, Balboa Park. 1-4:30 p.m. Free.

July 5-8

33rd Annual Gesneriad Convention and Flower Show at the Western South Coast Plaza, 666 Anton Road, Costa Mesa, CA. Info: (714) 786-1076.

July 6

Garden Talk on Water Plants by Kayoko Hamada, curator of the Huntington's Japanese Garden. Selection and cultivation of variety of water plants will be covered as well as ideas for incorporating water in a garden design. Sale of plants. Overseers Room and Garden Terrace at the Huntington. San Marino. 2:30 p.m.

July 6

Los Angeles Garlic Festival at West Hollywood. Red Cross benefit featuring everything from garlic ice cream to escargot, and jazz musicians. (213) 739-5200.

July 9

Convair Garden Club's 38th Summer Show, Casa del Prado, Balboa Park. 1-4:30 p.m. Free.

July 9

Michael Pablo, chief horticultural collector for Rainforest Flora, Inc., will present a multi-media program on rare bromeliads in the jungles of Central and South America. He will emphasize conservation and propagation measures to extend tillandsia plant life. Tillandsias will be for sale. South Coast Botanic Garden, Palos Verdes Peninsula. 2 p.m.

July 11-August 12

International Exhibition of Botanical Art and Illustration at Biota Gallery, 11740 San Vicente, Los Angeles CA. Opening reception July 11, 5-7 p.m. Gallery hours: Tues, Wed and Thu 11-7 p.m.; Fri, Sat 11-8 p.m. and by appointment.

July 15-16

San Diego Bromeliad Society's 15th Annual Show and Sale Casa del Prado, Balboa Park. Free.

Sat: 1-4:30 p.m.; Sun: 11-4:30 p.m.

July 15-16

Santa Barbara Orchid Fair. Santa Barbara Orchid Garden, 1350 More Ranch Road, Santa Barbara CA 93111. Phone (805) 967-9798. Visitors by appointment only.

July 16

The Lore and Lure of Herbs by Kirby Davis. Growing, propagating, and landscaping will be discussed. South Coast Botanic Garden, Palos Verdes Peninsula. 2 p.m.

July 22-23

San Diego County Orchid Society's 4th Summer Show and Sale at Casa del Prado, Balboa Park.

Sat: 12-4:30 p.m.; Sun: 11-4:30 p.m. Free.

July 28-30

Garlic Festival featuring 200 booths in Gourmet Alley, with garlic braids, garlic wine, garlic perfume, wreaths, etc. Gilroy CA. (408) 842-1625.

July 29

Fresno County Watermelon Festival in Kingsburg CA. (209) 897-2925.

July 29-30

San Diego Gesneriad's 13th Annual Show and Sale.

Casa del Prado, Balboa Park. Sat: 12-5 p.m.; Sun: 10-4 p.m. Free.

July 29-30

San Gabriel Valley Branch of American Begonia Society's Begonia Show and Sale at Los Angeles State and County Arboretum, Arcadia. Sat: 1-4 p.m.; Sun: 9-4:30 p.m.

July 30

Sacramento County Pear Festival Country Fair in Courtland to celebrate the pear harvest. Includes pears in every form, arts, crafts, and music. (916) 775-1922.

July 30

Fresno County Western Blackberry Festival, arts, and crafts, jams and jellies, and all types of blackberry delicacies at Westhaven. (707) 677-3121.

August 3 & 5

Garden Talk on Plants that attract wildlife

by Mary Schaffler in Overseers' Room and Garden Terrace at The Huntington, San Marino. 2:30 p.m.

August 4 - 5

Orange County Corn Festival in La Habra featuring a parade, arts and crafts booths, carnival, corn on the cob, plus other culinary delights.

(213) 697-1704.

August 4-31

Artists Tricia Kinney and Virginia Robertson

are featured in Hospitality House, Descanso Gardens La Canada 9-4 p.m.

August 5

Tomato Festival. Vegetable judging and tasting, chili cook-off, games, and entertainment in historic old Sacramento. (916) 443-7815.

August 5

Lake County Blackberry Festival, entertainment, arts and crafts in Clearlake. (707) 279-4293.

August 5-6

22nd Annual All Bromeliad Show and Plant Sale

sponsored by South Bay Bromeliad Associates at the South Coast Botanic Garden, Palos Verdes Peninsula. Sat: 1 - 4:30 p.m.; Sun: 10-4:30 p.m. Sale both days 10-4:30 p.m. Info: (213) 833-2657.

August 5-6

San Diego County Dahlia Society's Show Casa del Prado. Balboa Park. Sat: 2 - 5 p.m.; Sun: 10-4:30 p.m. Free.

August 5-6

San Joaquin County Dry Bean Festival. Celebration of the dry bean harvest at Tracy. Food booths, continuous entertainment, and more. (209) 477-8103.

August 5 - 13

Art Show featuring over 25 artists from the Mid Valley Art League. Artists will discuss their art works. On weekends, visitors may watch artists as they sculpt and paint. Descanso Gardens, La Canada. 9-4:30 p.m.

August 12-13

Mendocino County Blackberry Festival at Covelo. Games, crafts, blackberry run, talent show, and fiddle contest. (707) 983-6380.

August 12-13

Sonoma County Gravenstein Apple Festival in Sebastopol. Music, Farmer's Show and Tell, produce booths, largest crafts fair in area, games. (707) 544-GRAV. (544-4728).

August 13

International Water Lily Society's Annual Symposium at Hyatt Regency Alicante Hotel in Garden Grove.

Open to the public. Includes lectures, slide shows, and Los Angeles area tours. Aug. 16 tour to sites in San Diego. Aug. 21 and 22 tour to Santa Barbara Gardens. 19 Aug. features lectures on water lilies, pond ecology, and fish. For fees, contact International Water Lily Society, Box 10, Lilypons MD 21717-0010. (301) 874-5133.

August 19-20

San Diego Fern Society's 11th Annual Show and Sale at Casa del Prado, Balboa Park. Sat: 1-5 p.m.; Sun: 10-5 p.m. Free.

August 19-20

Cactus and Succulent Show and Sale sponsored

by the San Gabriel Valley, Long Beach, and Los Angeles Cactus and Succulent Societies featuring over 1,000 entries. Los Angeles State and County Arboretum, Arcadia. 9-4:30 p.m.

August 19-20

Alameda County Zucchini Festival at Hayward. Includes arts and crafts, entertainment, and zucchini prepared in a variety of ways. (415) 581-4364.

August 19-20

Dahlia Show hosted by the South Coast Dahlia Society featuring the Flower of the Year "April Dawn". Floral arrangements displayed by the Costa Verde District of California Garden Clubs. South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes Peninsula. Sat: noon-5 p.m.; Sun: 9-4 p.m.

August 25-26

Tehama County Olive City Festival at Corning. Old fashioned fun with olive tasting and recipes, games, and entertainment, crafts, and food booths. (916) 824-5550.

August 25-27

San Francisco County Fair Flower Show "Salute to Flowers '89" at County Fair Bldg. (formerly Hall of Flowers), 9th Ave., and Lincoln Way, San Francisco. 10-6 p.m. Preview Aug. 24 6:30 p.m.-8:30 p.m. Cost \$3.00 General Public; \$2 Seniors; Children under 12 Free. (415) 928-7414.

August 26-27

San Diego Turtle and Tortoise Society's 15th Annual Show at Casa del Prado, Balboa Park. 10-5 p.m. Free.

August 27

Begonias Talk by Jeanne Jones on cane-stemmed begonias. She will share her expertise on propagation, feeding, watering, and pruning these begonias, many of which will be on display. South Coast Botanic Gardens, Palos Verdes Peninsula. 2 p.m.

August 27

The Verdugo Swing Society will entertain with big band music sponsored by Descanso Gardens Guild at Descanso Gardens, La Canada Flintridge. 2:30 p.m.

September 2-3

San Diego Professional Horticulturist's 6th Annual Show, Casa del Prado, Balboa Park. Sat: 10-5 p.m.; Sun: 10-4:30 p.m. Free.

September 9

Ornamental Trees by Danny Simpson. Botany for Breakfast at San Diego Zoo. 8 or 10:30 a.m. Send reservations and fee to The San Diego Zoo, Education Dept., P.O. BOX 551, San Diego CA 92112-0551. (619) 231-1515.

September 9-10

California Prune Festival at the Yuba/Sutter Fairgrounds. Farmers market, live music, arts, and crafts, free samples, and lots of children's activities. (916) 743-6501

September 10

Concert Under the Oaks at Quail Botanical Gardens, 230 Quail Gardens Drive, Encinitas. Show music and some light classical music. Luminaries and illuminated waterfall. Bring blanket to sit on. Admission \$4 each. (619) 436-3036.

September 13 - October 2

Africa in Bloom Tour with Tineke Wilders. International Touring, Dept. 10, Box 28697, San Diego CA 92128.

September 16

Second Annual Eggplant Festival at Loomis. 9 a.m. Events all day. (916) 652-0893.

September 16

Kern County Cotton Harvest Festival before cotton picking starts. Parade, game booths, barbeque, cotton candy, and dance. (805) 764-5406.

September 16-17

San Miguel Begonia Society's Show and Sale. Casa del Prado, Balboa Park. Sat: 10-5 p.m.; Sun: 10-4 p.m. Free.

September 16-17

Monterey County Artichoke Festival Castroville. Artichokes in all types of delightful dishes, arts, crafts, and carnival. (408) 633-2465.

September 17

Ventura County 7th Annual Harvest Festival has food booths, entertainment, arts and crafts, displays. (805) 525-5561.

September 22-24

Mendocino County Fair and Apple Show at Boonville. An old-time county fair with livestock exhibitions, wine tasting, rodeo, and apple show. (707) 895-3011.

September 22-24

Tulare County Raisin Festival at Dinuba. Food and game booths, live entertainment, carnival, and arts and crafts fair. (209) 591-2707.

September 29-30

Symposium "The Plantsman's Garden" sponsored by the Friends of the University of California Botanical Garden, Berkeley at the Joseph Wood Krutch Theater, Clark Kerr Campus, 2601 Waring Street, Berkeley. Reservations and fee required by 14 Sep. Send to Plantsman's Garden, UC Botanical Garden, Centennial Drive, Berkeley CA 94720. (415) 642-3343.

September 30

Santa Barbara County California Avocado Festival at Carpinteria features over 100 arts, crafts, and food booths, avocado recipe, and photo contests. (805) 684-0038.

September 30

"Give the Earth a Hand Day" at Santa Barbara Botanic Garden. Dramatic exhibits, entertainment, music, games, and hands-on activities for all ages. Learn how to preserve and protect the earth. 10-4 p.m.

September 30 - October 1

San Diego Bonsai Club's Fall Show at Casa del Prado, Balboa Park. 10-5 p.m. Free.

October 21-22

The South Coast Bonsai Association will present their Annual Bonsai Show and Sale at the South Coast Botanic Garden, Palos Verdes Peninsula. 10-4:30 p.m. Show is Free. Admission to Garden \$3 for adults; \$1.50 for Seniors over 61 and students; 75¢ ages 5-12.



Dendromeris litoralis is a very beautiful plant which is not listed in any horticultural references because it is not yet in cultivation in the northern hemisphere. This evergreen tree or shrub, with large heavily ribbed leaves, thick succulent trunk, and striking pendent orange flowers, is endemic to Robinson Crusoe Island, off the coast of Chile.

Robinson Crusoe Island

By Bill Gunther and Paul Mahalik

Robinson Crusoe Island, a member of the Juan Fernandez group, lies in the South Pacific about 500 miles west of Santiago, Chile. Its location near 33 degrees south latitude equates with the 33 degrees north latitude of our gardens in southern California. For being at equivalent latitude, the climate of the two areas is very comparable, and the plants of the Juan Fernandez Islands should feel right at home if grown in southern California. That is what we had in mind when we decided to visit Robinson Crusoe Island in early 1989.

But how to get there? It turns out that there is a dirt airstrip on the uninhabited dry end of the island, and that in Santiago a person can hire a small plane to drop himself off there. From that dirt airstrip, a dirt jeep trail leads to a nearby bay and wharf, from which place a boat hauls passengers about 15 miles to the only town in the archipelago, located on the opposite rainy end of Robinson Crusoe Island. No road connects the airstrip with the island's only town.

The town has a population of about 400 people; they comprise 98% of the inhabitants of the Juan Fernandez Islands. They are of Spanish descent, very friendly, and very simple living folks, mainly making their living by lobster fishing. Their homes are of plain frame construction, with charming and cluttered gardens of exotic Mediterranean materials, mostly flowering types. There is electricity only two hours per day — but that is enough. Similarly, there is hot water for showers only two hours per day — but that, too, is enough. There are no privately owned autos, and there are no taxis — but they are not needed; there are no highways for them to use. Very definitely, the Juan Fernandez Islands are one of the most picturesque and unspoiled of the world's subtropical lands.

The reason why there is no road from the airstrip to the town, or from the town to anyplace else, is that the Juan Fernandez Islands were created by volcanoes which erupted from the deep

surrounding sea four million years ago. Except for the townsites and the airstrip, the islands mainly consist of steep cliffs rising from the sea up to altitudes of up to 5000 feet; road building in such terrain would be prohibitively expensive.

Since 1935, all of the flora of the Juan Fernandez Islands has been completely protected under the Chilean National Park System. In 1977 the Islands additionally were designated as a Biosphere Reserve, and recent conservation efforts have been subsidized by the World Wildlife fund.

Robinson Crusoe Island gets its name from the fact that in 1704 a Scottish sailor named Alexander Selkirk, a crewman aboard a sailing ship, displeased his Captain, for which reason he was put ashore and abandoned on this then uninhabited island. But he was young and energetic, and the island was provident, so he survived well until he finally was rescued, four and a half years later, by another sailing ship. The narrative of his experience was later published by a newspaper in London, and this account the English writer Daniel Defoe greatly embellished into the classic novel Robinson Crusoe, which since then, over all the world, has become a well known adventure story. The cave in which Selkirk lived remains today; it would be a great tourist attraction except that there are no tourists; during our sojourn we were the only strangers in the town. But the locals are so friendly that we could pass no one on the streets without a greeting.

But our prime interest was in the plants. The native flora consists of about 140 species of vascular

plants, of which 101, or about 70%, are endemic — growing nowhere else in nature. Although the vegetation suffers no problem from people, it does suffer from the problem of introduced browsing animals (feral horses, donkeys, goats, rabbits, rats and mice) which have brought 30 of these endemic plants to the endangered status.

One of the most spectacular of these endemic plants, already under cultivation in home gardens on the island but not yet introduced into the USA, is there called "col". Col is the Spanish name for what we call cabbage, and it is understandable that the islanders call it that, because the big leaves of the plants do look somewhat like cabbage leaves. But "col" is not related to cabbage. Taxonomically, it is *Dendroseris litoralis*, an evergreen perennial of the sunflower family which, while young, somewhat resembles a cabbage, but then continues growing and branching, with a thick succulent stem, until after some years, it actually is a small tree — with heavy fleshy leaves and startling orange composite blossoms. We anticipate that this unique plant will be introduced into California commerce during one of the forthcoming semi-annual plant sales held at Quail Botanical Gardens, in Encinitas, California. Quail Botanical Gardens is recipient of many seeds of a dozen different endemic plants of Robinson Crusoe Island, donated by CONAF, an agency of the Chilean National Forest Service which helps to conserve the endemic plants of the island.



GARDENING IN SPANISH

How to Communicate With Your
Spanish-Speaking Gardener

- for grove owners, farmers, home gardeners
- phonetic Spanish insures accurate pronunciation
- includes Contracting for Services, Giving Directions, Safety and Personal Needs
- Additional word lists make substitutions easy

Satisfaction Guaranteed



Ammie Enterprises
Box 2132-S, Vista, CA 92083

Please send _____ copies at \$9.95 each
Postage and handling \$1.00 each for first 3 books.
50 cents each for additional books
California residents add 6% sales tax

Name _____
Address _____
City _____ State _____ Zip _____

YOU ARE INVITED TO SUBSCRIBE TO . . .

California GARDEN

MAGAZINE

Since 1909

The perfect gift to a friend, relative or neighbor!

1 YEAR SUBSCRIPTION \$5.00

2 YEAR SUBSCRIPTION \$9.00

(Add \$3.00 per year for postage to foreign destinations)

OR BECOME A MEMBER OF . . .

SAN DIEGO FLORAL ASSOCIATION

INDIVIDUAL (magazine included) \$7.50
FAMILY (magazine included) \$8.50

(Please PRINT)

Name _____
Address _____
City _____ State _____ Zip _____
Phone _____

SAN DIEGO FLORAL ASSOCIATION
Casa del Prado, Balboa Park, San Diego, CA 92101-1619



From the tip of a sheltering peak, this photo shows the only town on Robinson Crusoe Island. Here live 400 people, 98% of the human population of the Juan Fernandez group. The only access is by boat, either from the dirt airstrip (15 miles distant) or from the mainland of Chile (460 miles to the east). Outside the town and the airstrip, there are no roads; there are just three motor vehicles on the entire archipelago.

CONAF is particularly watchful over one endemic plant which is so rare that it is not even named; it is a beautiful tree which looks like a palm but is not; it exists on only one mountain on Robinson Crusoe Island; it obviously is a flowering plant but during the years CONAF has been watching it has neither flowered nor seeded. When finally conditions arise which trigger it to bloom and to seed, it will be taxonomically studied, described and named, and any of the seeds surplus to the most urgent local need for replenishment will be distributed, including to Quail Botanical Gardens.

Happily not endangered is *Juania australis*, a beautiful slender-trunked feather palm which grows to approximately 30 feet tall. The trunk is straight, strongly ringed, and a bright light

green. It is very shiny in youth, though the shine is lost in the oldest trees due to lichen growth. The fruit is about the size of a grape, and is reddish orange in color, when ripe. This palm's habitat is principally on the upper ridges of the wet side of Isla Robinson Crusoe. We reached this habitat only after a four hour mule ride that was adventurous and very clearly dangerous. The trails up the ridges are very steep and narrow; we often were perched on barren cliffs high above the crashing surf. Efforts in the past to bring the very beautiful *Juania australis* into cultivation have failed, but there is real hope that in the future, in compatible situations such as seem to exist in southern California, *Juania australis* also will become an additional subject for use in enhancing our gardens and parks.

Beginning with the Mission days, exotic plants have been introduced in a steady stream into California to gradually transform our once entirely "native" vegetation into a huge mixture of natives and exotics, of species and hybrids, both in cultivation and in the wild. Very certainly, this change has been to the benefit of the economy, and to the beauty of its gardens. The addition to the California landscape of plants indigenous to the Juan Fernandez Islands will be but a continuation of this long established process. That being so, local gardeners should look at Quail Botanical Gardens with appreciation — as the San Diego county agency now most positively involved in this helpful action.



DEL MAR FAIR
FLOWER & GARDEN SHOW
June 16 - July 4
10 a.m. to 10 p.m.

THE WORLD IS OUR GARDEN

John Goodpasture Horticulturist

LANDSCAPE CARE
MAINTENANCE • TREE SERVICE
LAWN RENOVATION • SOD & SEED
PLANTING • SPRINKLER SYSTEMS

Call John: (619) 542-0469

"No Job Too Large Or Too Small"



CATALOG '14²⁰

Our trees are selections of the best performing varieties available.

Closed Tuesdays

FRUIT • NUTS • BERRIES

For Mild Climates

- STONEFRUIT TREES — Many on Zaiger semi-dwarf root stock
- APPLES — Anna, Dorsett Golden, Gordon, Granny Smith, Mutsu, Ein Shemer
- CITRUS — 65 varieties • FLORIDA BLUEBERRIES
 - KIWI FRUIT VINES — low and high chill
 - PERSIMMONS — 6 varieties
- MACADAMIA, WALNUT, ALMOND, CHESTNUT, PECAN
- MANGO, SAPOTE, BANANA, LITCHI, CHERIMOYA, PAPAYA

- DECOLLATE SNAILS •

4301 Lynnwood Dr., Chula Vista 92010
(619) 422-2400

Some Rare Fruit For San Diego

by Tom Del Hotal

NAME	EVERGREEN SEMI-DECIDUOUS DECIDUOUS	APPROXIMATE GROWTH/YEAR	APPROXIMATE MINIMUM TEMPERATURE	PLANT SUITABLE FOR:							FRUIT SEASON	FRUIT USED FOR:			
				CONTAINER	ESPALLIER	HEDGE	SCREEN	SHADE TREE	SHRUB	VINE		DRIED	FRESH	JAM & JELLY	JUICE
ACEROLA <u>Malpighia</u> <u>glabra</u>	X	3'-4' (to 12')	28-30°F	X	X	X	X	X			June- September		X		X
BANANA <u>Musa</u> <u>acuminata</u>	X	4'-8' (to 8'-16')	28-30°F	X			X				Summer- Fall	X	X		
CAROB <u>Ceratonina</u> <u>siliqua</u>	X	2'-4' (to 30')	18-30°F				X	X	X		October- November	X			
CHERIMOYA <u>Annona</u> <u>cherimola</u>	X X	4'-8' (to 25')	25-28°F		X		X	X	X		November- May		X	X	
FEIJOA <u>Feijoa</u> <u>sellowiana</u>	X	2'-3' (to 20')	10-12°F	X	X	X	X	X	X		Fall		X	X	
STRAWBERRY GUAVA <u>Psidium</u> <u>cattleianum</u>	X	2'-3' (to 18')	24-26°F	X	X	X	X	X	X		Fall		X	X	
TROPICAL GUAVA <u>Psidium</u> <u>guajava</u>	X X	2'-4' (to 25')	28-30°F	X		X	X	X	X		Fall		X	X	X
LOQUAT <u>Eriobotrya</u> <u>japonica</u>	X	2'-4' (to 25')	15-18°F	X		X	X	X			April- May		X	X	
LYCHEE <u>Litchi</u> <u>chinensis</u>	X	1'-2' (to 35')	26-28°F			X	X				June- September	X	X		
MACADAMIA <u>Macadamia</u> <u>sp.</u>	X	2'-4' (to 35')	25-28°F				X	X	X		Fall- Spring		X		
MALABAR <u>Bombax</u> <u>glabra</u>	X X	1'-2' (to 10')	25-28°F	X					X		Fall		X		
MANGO <u>Mangifera</u> <u>indica</u>	X	2'-4' (to 25')	25-28°F				X	X	X		November- March	X	X	X	X

NAME	EVERGREEN	SEMI-DECIDUOUS	DECIDUOUS	APPROXIMATE GROWTH/YEAR	APPROXIMATE MINIMUM TEMPERATURE	PLANT SUITABLE FOR:						FRUIT SEASON	FRUIT USED FOR:				
	CONTAINER	ESPALLIER				HEDGE	SCREEN	SHADE TREE	SHRUB	VINE	DRIED		FRESH	JAM & JELLY	JUICE		
MONSTERA <u>Monstera</u> <u>deliciosa</u>	X			2'-3' (to 10')	23-25°F	X		X				Summer		X			
NATAL PLUM <u>Carissa</u> <u>grandiflora</u>	X			2'-4' (to 18')	23-25°F	X	X	X		X		Spring & Summer			X		
PAPAYA <u>Carica</u> sp.	X	X		4'-8' (to 20')	30-32°F							Spring- Fall	X	X		X	
BABACO PAPAYA <u>Carica</u>		X	X	2'-3' (to 8')	26-28°F	X						Spring- Fall		X		X	
PASSION FRUIT <u>Passiflora</u> sp.	X			8'-12' (to 30')	28-30°F	X					X	Spring- Fall		X	X	X	
SURINAM CHERRY <u>Eugenia</u> <u>uniflora</u>	X			1'-2' (to 18')	28-30°F	X	X	X	X	X		Spring & Summer		X	X		
WHITE SAPOTE <u>Casimiroa</u> <u>edulis</u>	X	X		2'-3' (to 35')	25-28°F				X	X	X	Spring & Fall		X	X		
ORO BLANCO Pummelo x Grapefruit	X			2'-3' (to 30')	25-28°F				X	X	X	February- May		X		X	
ANNA & DORSETT GOLDEN APPLES <u>Malus pumila</u>	X	X		2'-4' (to 35')	Below 10°F	X	X	X	X	X	X	June & October	X	X	X	X	
RABBIT-EYE BLUEBERRY <u>Vaccinium</u> <u>ashei</u>	X	X		2'-3' (to 10')	Below 15°F	X	X	X	X		X	May- July		X	X		
JUJUBE <u>Ziziphus</u> <u>jujuba</u>		X		2'-3' (to 20')	Below -20°F				X	X	X	August- September		X	X		
KIWI FRUIT <u>Actinidia</u> <u>chinensis</u>		X		10'-15' (to 30')	10-15°F							X	November- December		X	X	
UTAH SWEET POMEGRANATE <u>Punica</u> <u>granatum</u>		X		3'-6' (to 15')	Below 10°F	X	X		X		X		September- November		X	X	X
PERSIMMON <u>Diospyros</u> <u>kaki</u>		X		2'-4' (to 30')	Below 10°F				X	X	X		Fall		X	X	

Tom Del Hotal is manager of Pacific Tree Farms, 4301 Lynnwood Drive, Chula Vista, CA

Tom Del Hotal is manager of Pacific Tree Farms, 4301 Lynnwood Drive, Chula Vista, CA

Water Efficient Plants

By City of Santa Cruz Water Department

Submitted by William E. Lovvorn

Water conservation in homes and gardens has always been a wise thing to do, but today conservation is more than a good idea. It is a necessity that we stretch our water supplies to insure that there is enough water to serve everyone who needs it.

One of the best places to make significant reductions in water use is in the garden. About one-half of the water used by urban residents is used outdoors. In the summertime the total use for gardens climbs even higher as the weather gets hotter and drier.

You can save water in the garden, however, without sacrificing the beauty or the quality of the landscaping. With efficient irrigation techniques, and by using ornamental plants and ground covers that are suitable to the climate (dry summers), one can enjoy a beautiful landscape during the summer months that does not require much water or maintenance.

PLANTING HINTS

Plants which are adapted to the long dry summers and shorter rainy winters are called "Mediterranean zone" plants. These include plants which are native to California, as well as those which originated in Mediterranean climates around the world, such as southern Europe and South America. These kinds of plants do not need much water in the summer, as they have demonstrated by thriving long before man was around to water them. In addition, many plants "adapt" to this climate if they are established properly by developing deep roots and maintained correctly using mulches and proper deep watering.

When planning a new garden or changing the one you have, keep in mind a few things that will result in water conservation:

Limit the size of lawn areas — lawns need great quantities of water, especially in the summertime. Most importantly, when you use turf, focus it in one of two areas and limit perimeter strips.

Convert lawn types to warm season or water-conserving species. Consider use of ornamental patio and deck areas instead of turf.

Wait until fall or winter to install a new garden — new plantings take more water than established ones.

Keep low-water plants away from thirsty plants — Mediterranean zone plants will suffer from too much summer watering.

Install a drip irrigation system for efficient watering instead of conventional and wasteful sprinkler systems.

Keep shade plants in the shade, and place water-loving plants at the bottom of slopes.

PLANT LIST

The following list is a good representation of low-water consuming plants.

REDUCE WATER USAGE

Improve Plant Growth

SARVON

may be the answer

ASK FOR IT AT YOUR FAVORITE NURSERY

An enzyme, humic acid, penetrant, and bacteria enhancing product that is widely used by professionals.

(619) 448-0659

Open Sundays Only
By Appointment

Hardy & Fouquette Orchids

WHERE YOU FIND THE UNUSUAL
Along With The Usual

Carlton Hills

9443 E. Heaney Circle
Santee, CA 92071

SHRUBS *Abella grandifloras prostrata*
Prostrate glossy abelia

Aloe

Arbutus unedo

Strawberry tree

Berberis mentorensis

Mentor barberry

Calceolaria integrifolia

'Golden Nugget'

Perennial pouch flower

Callistemon citrinus

Lemon bottlebrush

Ceanothus thyrsiflorus

Snow Flurry

Cistus

Rockrose

Cytisus praecox 'Warminster'

Moonlight broom

Echium fastuosum

Pride of Madeira

Erlogonum umbellatum polyanthum

Sulfur buckwheat

Escallonia

Genista lydia

Juniperus chinensis

Mint julip

Lavandula

Lavender

Leonotus leonuris

Lion's tail

Mahonia pinnata 'Ken Hartman'

California grape holly

Myrsine africana

African box

Nandina domestica compacta

Compact heavenly bamboo

Nerium oleander

Oleander

Plumbago auriculata

Cape plumbago

Rhamnus californica

'Eve Case'

Coffeeberry

Sollya heterophylla

Australian bluebell

Westringia rosmarinifolius

Rosemary bush westringia

HERBACEOUS PLANTS *Achillea*

Yarrow

Artemisia Schmidtlana

silver mound

Cheiranthus x 'Bowles' Mauve

Perennial wallflower

Ceratostigma plumbagoides

Dwarf plumbago

Coreopsis verticillata

Erigeron karvinskianus

Fleabane

Erysimum hieracifolium

Siberian wallflower

Kniphofia uvaria

Red-hot poker

Lanta

Limonium perezii

Sea lavender

Mirabilis jalapa

Four O'Clock

Oenothera bianderii

Mexican evening primrose

Pennisetum setaceum

fountain grass

Romneya coulteri

Matilija poppy

Santolna chamaecyparissus nana

Dwarf gray lavender cotton

Scaevola 'Mauve Clusters'

Fanflower

Senecio cineraria

Dusty miller

Teucrium fruticans

Bush germander

Verbena tenuisecta

Mexican perennial verbena

TREES *Acacia melanoxylon*

Blackwood acacia

Ainus cordata

Italian alder

Casuarina cunninghamiana

River she oak

Casuarina stricta

Beefwood

Cedrus deodara

Deodar cedar

Ceratonia siliqua

Carob

Cercis occidentalis

Western redbud

Cupressus glabra

Arizona cypress

Erlobotrya japonica

Loquat

Eucalyptus gunnii

Cider gum

Geijera parvifolia

Heteromeles arbutifolia

Toyon

Juglans nigra

Eastern black walnut

Koeleruteria bipinnata

Chinese flame tree

Lagerstroemia hybrids

Natchez-white flowers

Muskogee-lavender

Tuscarora-dark pine

Lyonthamnus floribundus

asplenifolius

Catalina ironwood

Melaleuca linarifolia

Flaxleaf paperbark

Melaleuca styphelioides

Prickly melaleuca

Olea europaea

Olive

Pinus halepensis

Aleppo pine

Pinus pinea

Italian stone pine

Pinus thunbergiana

Japanese black pine

Pistacia chinensis

Chinese pistache

Platanus acerifolia 'Yarwood'

Pyrus calleryana 'Aristocrat'

& 'White House'

Fruit pears

Quercus

Oaks

Schinus molle

California pepper

Tristania conferta

Brisbane box

PALMS *Chamaerops humilis*

Mediterranean fan palm

Phoenix canariensis

Canary Island date palm

Trachycarpus fortunei

Windmill palm

Yucca gloriosa

Spanish Dagger

VINES *Bougainvillea*

Campsis

Trumpet creeper

Rosa banksiae

Lady Banks rose

Solanum jasminolde

Potato vine

Tecomaria capensis

Cape honeysuckle

vitis vinifera

Wine grape

Wisteria

BULBS *Scilla peruviana*

Peruvian scilla

Crococsmia crocosmiflora

Montbretia

GROUND COVER *Acacia redolens*

Baccharis pilularis

Dwarf coyote brush

Ceanothus gloriosus porrectus

Mt. Vision ceanothus

Ceanothus hearstiorum

Hearst ceanothus

Coprosma 'Verde Vista'

Correa 'Carmine Bells'

Australian fuchsia

Cotoneaster 'Lowfst'

Cytisus 'Kewensis'

Kew Broom

Gazania

Hypericum calycinum

Creeping St. Johnswort

Rosemarinus officinalis

Rosemary

Repairing Concrete Water Features

By Bob Fenner

There are several approaches to repairing concrete water features. Human nature dictates that you will want to put in the least amount of time and money to achieve the desired result. This article details appropriate strategies for repairing leaking concrete water effects.

Water basins made of cementitious materials may leak due to cracking, wear, or poor construction. These repair problems are common to our industry and their expedient repair constitutes a large market. The selling and application of various repair technologies can be described in order of least cost and effort versus perceived scope of job and likelihood of success.

Approaches:

Simplest problem/solution to disaster/salvation

1) Individuals facing water feature preparations have several options to choose from. At the lowest end of the spectrum, they can do nothing! i.e., abandon the system, or keep adding water periodically as it disappears. This may present a problem in terms of material leaching back into, poisoning the system, or damage due to leakage.

2) If the basin(s) and fall(s) are intact with no visible large cracks and the structure is stable (check for adequate soil compaction and/or other support) a coating of asphalt-based emulsion (e.g. Henry's or Marvin's) or epoxy-based paint or cemen-

tious foundation coating, may be applied in "bad" areas or more appropriately over the entire surface. Desired surface color and texture will dictate which type of coating to use. Note: "clear" sealers and penetrants designed to treat new concrete will not work on cured concrete leaks.

3) If hairline to large cracks are evident and the basin is otherwise stable, you can chip out the damaged spot to expose a new, clean surface and try to remedy (band-aid) the area with a patch of silicon-rubber based material, hydrated calcium silicates (e.g. pool patch, foundation coating) or epoxy-based materials. The prognosis for such "repairs is not good; at best they are temporary measures that will fail.

4) For repairing the more serious "moving" and "growing" cracks, one should use an elastomeric membrane system. These are most commonly polyurethane/bitumen or chlorinated-rubber based and can be applied by brush, trowel or specialized spray equipment. These materials have a high tensile strength (elasticity) and can be applied to the questionable areas alone, or better still, over the entire basin, fall surface. It may be necessary and/or is strongly advised that these elastomerics be plaster coated over. Read and follow the manufacturers instructions thoroughly.

5) Situations where rocks go through the basin wall (always a disaster), large cracks, questionable compaction and obviously unstable walls, call for the most drastic action. In this, the worst scenario, it may be necessary to remove all of the existing structure and start from scratch. This, of course, costs more than doing the job right the first time. At this point, the failing system may be left in place, and the basin

HOYAS

OVER 250 — Expanding collection
List/description \$1 — quick response

HILL 'n dale

6427 N. Fruit, Fresno, CA 93711 — (209) 439-8249



Unusual plants for the
garden. Open Saturdays
or by appointment.

christine s. wotruba
10548 anaheim dr.
la mesa, ca 92041
(619) 466-1203

GOOD EARTH LANDSCAPE

LANDSCAPE INSTALLATION & MANAGEMENT
INTERIOR PLANT DESIGN & INSTALLATION
PLANT AND CONTAINER LEASING

(619) 276-6411

DAVID MILLER

355615

considered a mere hole in the ground in which new walls, fall(s) and bottom are constructed over old.

One common method is to apply a cement or plaster coat over the entire basin surface. This coating consists of plastic cement, sharp sand, water and possibly a coloring agent. For added strength this method may be modified by adding a reinforcing mesh to the "new" basin. Hexagonal chicken wire in two meshes, welded wire, and for very large systems, tie-wired rebar may be called for. This is not, however, the most sure-fire method.

The most-appropriate, best-available technology consists of retrofitting a liner of thick rubber or vinyl over the surface of the existing surface. For falls a trough is constructed as a water-proof base/form and the liner is fitted over it. This is adhered to the basin liner, making a continuous water-proof membrane. The liner may be economically left as it is, but to ensure against rips and punctures, it is prudent to apply mesh and mortar over all as above. If more rock work is desired, this can be done at this time or later.

This is the best method of repair in terms of guaranteed long-term leak-proofing.


Other Considerations:

Plumbing may be a primary or secondary problem in dealing with leak problems of unknown or "known" origin. It is strongly suggested that all plumbing lines be pressure tested before wasting time and money on repairing the concrete.

It may almost go without saying that the system must be absolutely dry and lean before making these repairs to ensure proper adhesion.

How do you go about deciding which of these technologies applies to the situation at hand? Read this article carefully! Evaluate the source of the problem; apply the appropriate method; don't take short cuts that may not work. Your success with these different repair methods will vary proportionately with the amount of time, energy, and money you are willing to invest.

Bob Fenner is our resident expert on waterscaping with partnerships in Aquatic Environment.



GINGER EVANS
 11025 Skywood Drive
 El Cajon, CA 92020
 619 579-6800

RANCHO LAS PALMAS NURSERY

General Nursery Stock
Palms Tropicals

Rare Plants
Cycads Specimens

Guavas

By B. Francis Klein

Guavas were originally looked upon as an ornamental shrub, but in the last 10 or 20 years, they have been tried and accepted as a truly fine eating fruit, either as a canned, pickled, or fresh food.

It is also used in jams and jellies and as a flavoring paste. However, until you become better acquainted with the guava, you should take into consideration that there are many varieties. Some are sweet and some are really sour.

The sweet variety is great. Just clean it and eat it chilled, put some into fruit cups, for a dinner dessert, even cut some up and add just a little to a jellied salad.

But the sour variety makes the best jams and jellies, even if you have to add a lot of sugar.

The guava is high in ascorbic acid, that's vitamin C, and it does not lose that value when made into jam or jelly.

Want to try something totally different? Get some of the sour kind, and after cleaning them up, cook them up with some onions, garlic, celery and add whatever spices and herbs you like. When the whole mess gets soft and pulpy, put it through a collander and you have a new spread for hamburgers, french fries, hot dogs. What is it? It is called guava catsup.

B. Francis Klein was a regular contributing syndicated columnist for Copley and has written for other magazines.

Cynthia R. Drake

LANDSCAPE • HORTICULTURAL CONSULTANT

Landscape & Patio Designs
Landscape Pest Control

11121 Saunders Court
San Diego, CA 92131
(619) 271-8933

DAYLILIES OF TOMORROW

featuring
our own new hybrids



Visit one of the finest Daylily collections in Southern California

**CREATE YOUR OWN
TROPICAL LOOKING GARDEN**

Easy care, full range of color. Blooms May thru December
(can also be grown in containers)

DON & MARY HARDGROVE

1656 N. Second St. (between Greenfield & Pepper Dr.) El Cajon • 447-4922
Open Tuesday - Sunday 10 am - 5 pm

History Of The George W. Marston Home & Garden

Submitted by Margaret Pethley

George White Marston came to San Diego from Wisconsin in October of 1870. His business life began as a clerk in the Horton House (the leading hostelry of the community). After that, he was assistant bookkeeper in the store of A. Pauley & Sons, a store which dealt with a business variety from buying gold dust and bullion, grain and wool, to acting as agents for the wharf, and selling draft on steamer days. From the foot of Fifth Avenue (then in the tidelands) with the Pauleys, he moved to the Joseph Nash Store, 5th & K, to become associated with Charley Hamilton (also a clerk with the Nash Store). Together, Marston & Hamilton purchased the Nash stock in 1878. In five years time, all financial obligations had been met. Stock then consisted of groceries, hardware, household goods, some dry goods, and men's wear. Hamilton did the buying and managed sales; Marston took care of the books and assisted in sales when needed. The partnership lasted five years more ... then there were two stores.

George Marston married Anna Gunn. They left for a honeymoon on board the side-wheel steamer "Orizaba" for San Francisco; they continued on (by rail) to Quebec, Massachusetts, and New York. Marston combined the pleasure trip with business by buying stock of dry goods and men's clothing in New York and Boston. By the time they returned to San Deigo, The Marston Store was born.

At first, George and Anna lived in a small cottage at Sixth Avenue and C street; in 1885 they built an elaborate home at Third Avenue and Ash Street where they lived for 20 years. Nine children were born to the Marstons.

In 1904, they asked Irving Gill to design a home on a 10 acre parcel of land lying north of Upas and east of Seventh Avenue. He began acquiring land and urged the city to do the same to establish parks. George Marston gave the city the land for both Presidio Park and the Junipero Serra Museum. In later years, he helped establish

Golden Hills Park, Torrey Pines Park, Balboa Park, and the Anza-Borrego State Park.

When the family moved into the house at 7th and Upas, Balboa Park was undeveloped, and the house-site was devoid of major vegetation except for scrub-grass. The house is L-shaped, 3 stories with six bedrooms and 3 bathrooms; the third level has a large attic room with 3 smaller chambers opening off it. Entrance to the house is on the west end, and the formal gardens are to the north. The gardens have a large rectangular green lawn with flagstone walks around it. There are terraces to the north of the garden and house; the eastern portion has paths winding down through heavy vegetation. Two bronze plaques serve notice that the San Diego Floral Association singled out the Marston Estate as the finest large garden in the city in 1930 and 31. Many of the older trees and plants were gifts of Kate Sessions, the famed horticulturist who lived nearby.

The two huge, gnarled oaks on the velvet-like lawns in front of the house, and a number of eucalyptus trees on the edge of "Cabrillo Canyon" were favorites of George Marston. Mary Marston, the last Marston to reside in the home (died in 1987 at the age of 107), remembered that in early years, some of the gardens behind the house had been planted with orange and grapefruit trees, and there was a rose arbor under which grew fragrant, long-stemmed violets. These are gone now ... but the gardens are abloom and carry the scent of bridal wreath, fragrant wisteria, and Queen Elizabeth roses.

Come join the San Diego Chapter of the Daughters of the American Revolution for an afternoon in the garden of the Marston home, 3525 Seventh Avenue, Saturday, June 24th, 2-4 p.m. Light refreshments. Advance reservations required. Send reservations to Alberta Dennstedt, 4372 Ridgeway, San Diego, CA 92116. \$10 per person. Wear sensible shoes so you can walk on the flagstone walkways safely.

PATRONIZE OUR ADVERTISERS.
LET THEM KNOW YOU SAW THEIR AD IN
CALIFORNIA GARDEN.

AFRICAN VIOLETS

STANDARD, MINIATURE, TRAILER
DECORATIVE CERAMIC POTS - HELPFUL ADVICE
SUPPLIES

HOURS: TUE.-FRI. 10 A.M.-5 P.M., SAT. 10 A.M.-4 P.M.

PATCHES AND POTS - (619) 442-7037

583 EL CAJON BLVD., EL CAJON, CA 92020

GET FREE SEEDS, PLANTS, BULBS, CUTTINGS

plus gardening money-savers year-round by mail.

Information 25¢

Gardeners Share, P.O. Box 243, Dept. CG
Columbus, IN 47202-0243

BALBOA PARK AFRICAN VIOLET SOCIETY

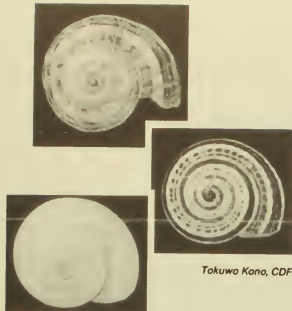
Meets at 7 p.m. - 4th Monday of each month

Room 101, Casa del Prado, Balboa Park

Dessert 6:30 p.m.

Meeting and culture program 7 p.m.

Visitors and members are welcome.



White Garden Snail

WHITE GARDEN SNAIL is a potentially destructive pest of ornamental plants, vegetable gardens, and fruit trees. Originally native to Sicily, this snail is now widely distributed in the Mediterranean area and along the coast of western Europe extending northward into the British Isles, Belgium, and Switzerland. It also occurs in the coastal areas of western and southern Africa and Australia. Following two previously successful eradications from California, a new infestation was recently discovered in western San Diego County.

DAMAGE

The white garden snail attacks a wide variety of vegetables, forage and cereal crops, fruit trees, and ornamental plants. Damage occurs when snails feed on leaves, flowers, and fruit. Extensive feeding can result in sunburned fruit, stunting of growth, or sometimes death of the plant. Additionally, plants and other objects are fouled by the snails' slime trails. This snail is also an intermediate host of lungworm and several other internal roundworm parasites of sheep and cattle.

HOW TO RECOGNIZE THE WHITE GARDEN SNAIL

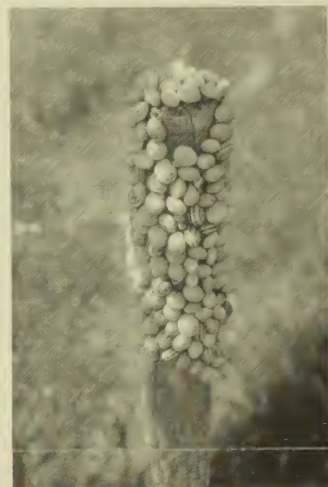
The white garden snail is noticeably smaller than the common brown garden snail. When full grown, its shell is about the diameter of a nickel (18-20 mm), ivory white in color and frequently marked with a number of thin brown spiral bands. These bands may be solid, broken into dots and dashes, or entirely absent.

BIOLOGY

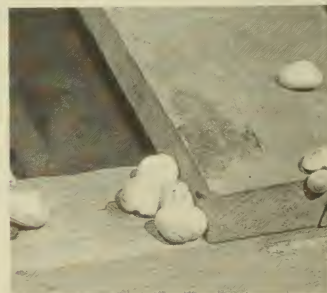
Young snails hatch during the winter months but stay hidden in the ground for a few weeks before emerging to feed. They grow rapidly in the spring and most become adults by summer. The mature snails are often highly visible during the summer months when large numbers can be found clumped together on trees, bushes, buildings, fences, and other vertical surfaces. This inactive resting stage protects them from drying out during hot dry periods. With the onset of fall rains, the snails again become active and feed, mate, and lay batches of eggs in the soil.



Snail and Feeding Damage



Inactive Resting Snails



Infested Crating

If you see a snail resembling this, report it to the state or county Department of Agriculture.

'Green Thumb, Brown Knees' Tend to Organic Garden

By Cathy M. Jackson

When Leo VanMeer or his wife, Ruth, go to the grocery store to buy lettuce, it's an act of desperation.

Commercially grown vegetables and fruits just don't have the same crunch or flavor as the produce organically grown in their own backyard garden, they contend.

"Sometimes we have to buy vegetables that are out of season, but we don't like to," said Leo VanMeer, an 80-year old retired teacher. "I like working in the soil, so we grow our own."

VanMeer's quarter-acre back lot on Palm Drive is covered with mint, tomatoes, green and butter beans, squash, watermelon, parsley, collard greens, kohlrabi, pineapple plants, musk melons, and grapefruit, tangelo and orange trees.

Wherever there's a space, VanMeer is quick to sow it. "It's just an ordinary city lot, but I use every piece of it," he said.

Lettuce flourishes beneath the tangerine tree, cucumbers share the shade of a Japanese persimmon tree and sweet potatoes are sown in a corner.

Besides the vegetables and fruits, there are roses, hibiscus bushes and nasturtiums.

As long as he is able, VanMeer says, he will continue to till, sow and reap his garden's harvest.

Twice a year he orders seeds by catalog from Pennsylvania and Iowa. He prepares the earth in February for a spring crop and in October for fall crops.

When the plants become laden with fruit, VanMeer and his wife eat what they can, freeze or can some, and give the rest away.

Neighbors, friends and family get treated to the bumper crops, like the four bushels of carrots produced last season. In return, about seven of the neighbors supply VanMeer with grass clippings and tree trimmings for his compost heap.

"I use lots of the good old stuff like compost, kitchen scraps, stalks and leaves from the garden and commercially dried cow manure to fertilize with," he said.

A native of Michigan, where he supervised business classes in a cooperative education program for 20 years, VanMeer grew up knowing the bountiful goodness of the earth.

VanMeer's family owned a corn and wheat farm near Port Huron, Michigan.

"A garden was a necessity for us," he said. "Very few dollars came in from the cash crops. My mother was always in the garden, and I was there with her."

He said he remembers planting his first crop — radishes — at age 4 or 5.

VanMeer's pamphlet, **How to Garden Naturally, Without Using Pesticide Sprays**, may be obtained, free of charge from Leo VanMeer, P.O. Box 2138, Clearwater, FL 34617. (please send self-addressed stamped envelope.)



CLASSIC GARDENS
Landscape Design & Construction

We are offering a complete service in landscape design and installation.

(619) 459-0316
License no. 471422

ENTER A WORLD OF
OUTDOOR ENJOYMENT



WALTER ANDERSEN NURSERY
3642 Enterprise Street
San Diego, CA 92110

OPEN 7 DAYS A WEEK 8:00 A.M. TO 5:00 P.M.

(619) 224-8271

FREE GARDEN CLASSES
9:00 A.M. — SATURDAY MORNINGS

Antonelli Brothers

TUBEROUS BEGONIAS
2545 Capitola Road
Santa Cruz, California 95062

36-page Color Catalog 25 cents

**ARTISTIC
PRUNING**

Landscape Design
&
Execution

JIM STELLUTI
298-7641

The Stars Of The Geranium Garden

By Carol Roller

One of my customers recently observed that zonal "geranium" had changed a lot in recent years. "Now they are shaped like stars," she said. She was looking at a delightful assortment of plants called stellars.

The first of these was found in Australia about 1950. Instead of the familiar roundish zonal leaf with crenate edges, the leaf is semi-circular with wedge shaped indentations, as if it had been a folded paper cut with a scissors, and then unfolded. The soft pink blooms have five petals, all of which are cut and notched. The three lowers are cut into a different pattern than the two narrow uppers. Eventually the name "Chinese Cactus" became associated with the plant.

The well-known Australian plantsman, Edgar "Ted" Both hybridized it with ordinary, circular flowered zonal pelargoniums. It is not possible to say how many crosses he may have made, or how many seedlings he may have grown. His nursery introduced 82 of them. His work is important because he produced many beautiful and useful plants. It also proved that 'Chinese Cactus' was merely a mutant form of zonal in spite of its decidedly different appearance. Although the fan shaped leaf and star-shaped bloom are recessive characteristics, their inheritance is predictable according to Mendel's law.

The first of Both's hybrids is called 'Red Demon'. Basically, it is a red form of 'Chinese Cactus'. Other Australian hybridizers also produced stellars. One of the most popular is 'Bird Dancer', a miniature with dark zoned leaves and wispy salmon flowers. The arrival of 'Chinese Cactus' and its early hybrids in California initiated another flurry of plant breeding.

Stellars are now available in the full range of colors which are genetically possible in zonals — white, white with pink, all shades of pink, coral, salmon, nearly orange, rose, red, violet, plus dark centered pale flowers and white centered ones. A commercial seed strain is available. These plants will be singles in various colors. The double cultivars are less distinct because of their shaggy appearance. The most dramatic plants are recent introductions from Australia. These singles have especially large blooms.

Stellars require the same culture as other zonal pelargoniums. The potting mix should drain well. Feed lightly as needed to keep them growing well. Water thoroughly when fairly dry. Plants should not be allowed to become too dry, because the root hairs will be damaged and the plant will be lost. On the other hand, overwatering, standing the plant in a water-filled saucer, or the use of heavy soil will deprive the roots of air causing them to smother.

Many problems will be avoided by using sterile mix and careful watering. Spent flowers and old leaves should be discarded. They can harbor diseases and give snails or slugs a hiding place. When planted in the ground, the amount of care needed is much less than when containerized. Stellars in general are less prone to caterpillar attacks and rust than most zonals, but they are not immune.

Stellars (and the rest of the zonals) should be pruned every year to revitalize the plant and keep it well shaped. Traditionally, this is done in the fall, but pruning can be done in any season as long as the weather is not extremely hot or cold. If a few cuttings are taken from time to time, a full scale pruning may not be necessary. The cuttings root easily at any time of the year.

The mysterious 'Chinese Cactus' is the only known plant of its type to have occurred naturally. It is still grown by those of us who cherish the origin of the stellars. The group is well named; they are star performers.

Carol Roller is the President of the International Geranium Society. She has hybridized many pelargoniums and is well-known for her outstanding knowledge of the history and culture of geraniums and pelargoniums.

McDANIEL'S MINIATURE ROSES



BUSH • TREE •
CLIMBER •
HANGING
BASKET

HARDY AND EVERBLOOMING
SHIPPED ALL YEAR

7523 ZEMCO ST.
LEMON GROVE, CA 92045
Please Phone (619) 469-4669

Culinary Herb Garden For Condo and Small Backyard Gardens

By Heirloom Gardens

If you are a person who loves to grow things and have a limited garden area, you can fulfill your dreams by growing herbs. Besides being hardy and strong, disease and pest resistant, decorative and fragrant, they are easy to grow in small plots and even in containers. Herbs are an ideal crop for those with a green thumb who buy most of their food at the store. After all, how many people in our modern age have time to plant and care for the forty foot rows that come from a pack of vegetable seeds?

You will notice that unlike potatoes, carrots, and other supermarket vegetables, herbs do not ship and store well. If you inspect the fresh herb section of the produce market, one thing is generally very true. The herbs don't look very good. Herbs wilt and deteriorate quickly after harvest. They are best fresh, when their flavors are at their peak, and their fragrance is most alive and vivid. This is the purpose of the kitchen herb garden. Buy your foods at the store, but flavor your meals with the herbs you grow.

Herbs are survivors and do well in almost any soil or location. They can take the love for a garden and put it in a small space. Like the zesty fragrance of herbs, a little goes a long way and your little garden can flavor your meals the entire growing season. If you take time to dry some of your herbs you will have a flavorful kitchen through the winter months, too!

To insure that you have the right plant mix you should consider the kinds of food you eat, and how you like them to taste. This will enable you to plan your garden plant by plant. Here is a sample plan which will appease 90% of the culinary artists in the world. Note that a few sections are shown with uncommon favorites like a sour sorrel, a bitter radicchio, or a cool burnet. Many are annual plants and these may be changed from year to year. There are simply so many varieties

you may want to try different herbs for comparison and change. Leave the growing of your vegetables and the raising of your meats to the farmers, but, let the flavoring be by your own hands.

Heirloom Gardens is a source for over 200 varieties of culinary and rare herb seeds. Receive their catalog and list for \$2.00. Send to: Heirloom Gardens, P.O. Box 138, Guerneville, CA 95446.

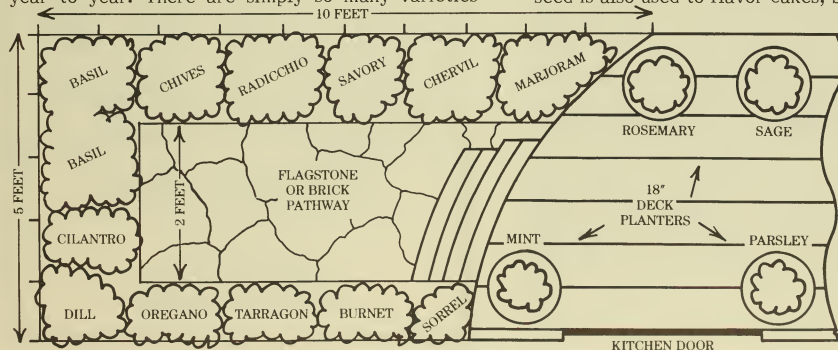
BASIL - There are many varieties to choose from. The spicy clove-like flavor and aroma bring out the best in soups, salads, cheese, meat sauces, gravies, hors d'oeuvres, tomatoes, vegetables and butter sauces. Basil is very easy to grow and may be harvested several times during the growing season.

CHERVIL - Chervil is an old French cuisine secret. The mild anise-parsley flavor rounds out or blends the taste of other herbs. The French call it the "Chefs Helper" and it is a key ingredient to the blend called "Fines Herbes." The light green leaf is also very attractive. Use Chervil to season cream soups and sauces, omelettes, and egg salads, fish, potatoes and other vegetables.

CHIVES - The delicate onion-like flavor is a must for the gourmet. There is also a garlic flavored chive. The deep blue-green speers and the bright pink flowers make this an ideal garnish. Chives are used to flavor salads, omelettes, soups, stuffings, cheeses, potatoes, sour cream dips, hamburger, souffles, meatloaf, and vichyssoise. Clip chives all the way down, they will come back.

CILANTRO - Cilantro holds an earthy flavor note that blends well with hot and spicy cuisine, such as Mexican, Indonesian, and Chinese. The decorative leaves are used to flavor lentils and beans, fish, gazpacho (with lime and hot sauce!), salsas, tacos, tostadas, albondigas soup, chili verde, stir fry, tofu and miso soups, sushi and rice dishes. The Cilantro seeds or Coriander seed is a somewhat sweet spicy flavor used in cakes and breads.

CUMIN - Cumin has a warm spicy flavor with a mild mustard note. It has been a favorite culinary flavor since the days of the Pharaohs and probably before. It is used to season meats and meat gravies and sauces, beans, ham, sauerkraut, East Indian curry dishes and dips and is a must in chili. Cumin seed is also used to flavor cakes, bisque, and breads.



**GOURMET
FLAVOR
GARDEN**

DILL - Dill has a pleasant bitter taste with a mild anise overtone. The beautiful finely feathered leaves make an excellent garnish and add zest to meats, eggs, omelettes, cheeses, soups, salads, dressings, fish, steamed vegetables, cream sauces, steaks and chops, chicken and breads. Dill weed is the leafy part of the plant and has a more subtle flavor than the seeds.

MARJORAM - Marjoram is an oregano-like flavor with a lighter palette. Marjoram is used to flavor sauces, soups, salads and dressings, meats, stuffings, eggs, and cheese. It is popular in Greek cuisine and also finds a place in Mexican dishes.

MINTS - Mint has the wonderful menthol fragrance and clean crisp flavor. There are many types of mint. Mints make excellent tea, and are used in many desserts, jellies, etc., and also with meats, pork, lamb and game. Rub the table top with a handful of mint leaves before the guests are seated to promote a good appetite.

OREGANO - Oregano is a hearty, warm aromatic flavor which is used as a base flavor to compound other herbs around. It is used to season lamb and other meats, gravies, sauces, cheese, chile, potatoes, and vegetables. It is also a must in tomato sauces, seafoods, and salad oils.

PARSLEY - Parsley has a refreshing clean green flavor that goes well with many foods. The curly leaf type is an attractive garnish and the flat leaf variety holds a stronger flavor for cooking. Use parsley in stews, with marinades for meats and fish, potato and egg salad, tomatoes, chicken creamed soups, and vegetables. Stir chopped parsley

into the saute butter or oil before adding anything else. Use it as an after dinner breath freshener -- that's why a little piece is served on the plate!

ROSEMARY - The spicy piney tang of this highly aromatic herb is a treat to use. Whole sprigs are laid on meats and roasts for flavor. Use rosemary in the barbecue sauce for chicken, hamburger and steaks. It is valuable to flavor soups and stews, stuffings and basting oils, lamb, veal and poultry.

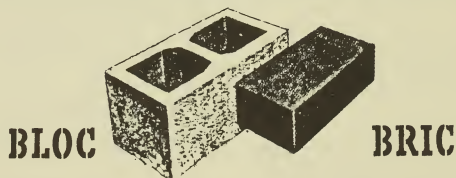
SAGE - Sage is a bitter aromatic with an excellent base flavor note to build on. Sage is used to flavor stuffings, turkey, sausage, meats, fish, game, beans and cheeses. Sage operates well with additions of savory, thyme, basil, onion and is a must in beef stew. Years ago sage was considered a strong medicinal herb and found its way into cough syrups and poultices.

SAVORY - Savory has a sharp peppery bite to it, and is used to spice things up. Use savory to season beans and bean salad, green beans, rice, sauces, stews, fish, gravies, cole slaw, and chicken. It does well as a pepper substitute. In the old days when clipper ships brought expensive cargoes of black pepper from the Far East, this European herb was known as "poor-man's pepper."

THYME - Thyme is a delicious hot tangy flavor with a pleasant aroma. The tiny leaves of the thyme plant make a big difference in food flavors. Use thyme to season split pea soup, stew, sauces, gravies, stuffings, chicken, pork, sour cream dips, creamed vegetables, chopped beef, rabbit and salad oils. Very good with cheeses, as a tea and in marinades.

HAZARD MART

San Diego County's Masonry and Home Center



A New Location To Serve You NOW OPEN!

5590 EASTGATE MALL — OFF MIRAMAR AND 805

FOR ALL YOUR LANDSCAPE AND GARDEN NEEDS — 3 LOCATIONS TO SERVE YOU!

HAZARD MART
Miramar
5590 Eastgate Mall
587-3636

HAZARD MART
El Cajon
1155 Vernon Way
448-7411

HAZARD MART
Chula Vista
491 "C" Street
427-2062

FERNS OF THE SAN DIEGO ZOO GARDEN

By Phyllis Bates, Fern Specialist

*Reprinted with permission of the
Zoological Society of San Diego

1. *Dicksonia antarctica*

Tasmanian or New Zealand tree fern. Stout trunk, upward reaching fronds, harsh, prickly thin leathery leaflets. Origin: Australia

2. *Rumohra adiantiformis*

Leather fern or Leathery Shield fern. Epiphytic fern with long creeping slender rhizomes and medium sized fronds. Texture of foliage is heavy. Used in florist trade. Origin: Africa, New Zealand, Polynesia, Australia, South America.

3. *Platynerium bifurcatum*

Staghorn fern. (Elkshorn fern in Australia.) Epiphyte. Shield fronds generally rounded, fertile fronds divide and divide again in last half of length. Great variability in form. Origin: Australia, New Guinea, Indonesia, New Caledonia, Lord Howe Island.

4. *Asplenium nidus*

Bird's nest fern. Epiphyte. Long entire fronds form deep nest up to 6" across. Origin: pantropical.

5. *Todea barbara*

Austral king fern. Terrestrial with multiple trunks, stiff, shining upright fronds. Spores on lower leaflets. Origin: Australia, New Zealand, South Africa.

6. *Cibotium chamissoi*

Man fern. Huge tree with wide spreading fronds and almost leathery blades. Upper part of trunk and stipe is covered with soft light brown hairs. Origin: Hawaii.

7. *Asplenium bulbiferum*

Mother fern. Terrestrial/epiphyte. Very common because adaptable. Produces plantlets along fronds. Origin: Australia, New Zealand.

8. *Drynaria rigidula*

Basket fern. Epiphyte. Long weeping fronds arise from cluster of dry nest leaves. Easy to grow. Origin: Malaysia, Philippines, Indonesia, Polynesia, New Guinea, Australia.

9. *Platynerium superbum*

Staghorn fern. Epiphyte. Easy in San Diego. Do not keep wet while weather is cold. Huge shield frond is lobed at top and extends forward. Single spore patch forms per fertile frond. Origin: Australia.

10. *Stenochlaena tenuifolia*

Vine fern. Terrestrial. Needs support. Decorative, long slender leaflets are pinnate, dimorphic. Origin: Semitropical Asia.

11. *Cibotium schiedii*

Mexican tree fern. Huge terrestrial. Forms clumps. Short trunks and long arching soft fronds with long leaflets. Needs lots of water. Origin: Mexico.

12. *Cyrtomium falcatum*

House holly fern. Terrestrial. Clumping. Shining foliage is holly like. Easy. Origin: Japan, Korea, China.

13. *Polypodium aureum*

Rabbits foot, Bears foot, golden polypody. Epiphyte. Thick furry golden-haired rhizome gives rise to long arching, grey green lobed fronds. Variable. Origin: Florida, Mexico, Central America, American tropics and semi-tropics.

14. *Cyrtomium fortunei*

Terrestrial. Dwarf version of *C. falcatum* with fewer projections on fronds. Origin: Japan, Korea, China.

15. *Davallia fejeensis*

Rabbit's foot fern. Epiphyte. Lacy soft foliage. Thick gray brown rhizome is stiff, tends to grow upright. Good basket plant. Popular. Origin: Fiji Islands.

16. *Polystichum setiferum*

'Congestum' shield fern. Terrestrial. Scaly fronds form cluster or rosette. Ends of leaflets form multiple leaflets and crests. Origin: Europe.

17. *Pyrossia lingua*

Simple and crested forms. Tongue fern, Japanese felt fern. Epiphyte/terrestrial. Thin wiry rhizomes scramble about. Normal fronds are medium sized, entire, dark green, leathery. Spores form on mats on underside. Tips of fronds may crest to an extreme degree and margins can send out thin projections. A plain and a crested form can be seen at the Fern Island on the Tiger River trail. Origin: Japan, China, Taiwan, Laos, Thailand.

18. *Davallia solida*

Hare's foot fern. Epiphyte. Blackish pencil sized creeping rhizomes. Yellow spores show at edges of fronds. Good basket and garden plant. Cold sensitive. Origin: East Indies, Malaysia, Polynesia, Singapore, Java.

19. *Dryopteris erythrosora*

Autumn fern. Terrestrial. Temperate to semitropical. Clumping. Fronds are bipinnate, shiny, triangular, bright coppery to red in color when young. Sori may appear as bright red circles especially in temperate zones. Origin: China, Japan, Korea.

20. *Dryopteris sieboldii*

Terrestrial. Few long large leaflets on fronds. Dark leathery. Acid soil condition. Origin: Japan, China.

21. *Aglaomorpha coronans*

Epiphyte. A large coarse fern with a thick, wooly rhizome. Bases of lobed fronds are expanded and form a nest to catch litter. Keep dry when cool. Origin: North India, China, Hong Kong, Taiwan.

22. *Polypodium vulgare*

Common polypody. Epiphyte or terrestrial. A small creeping fern with erect lobed fronds, tapering to tip. Grows in semitropical to temperate locations. Deciduous. Origin: Europe, N. America, Japan, China, Africa.

23. *Davallia trichomanoides*

Squirrel's foot or rabbit's foot fern. Epiphyte. Small brown hairy creeping rhizomes. Many lacy long triangular fronds. Loses fronds in cool weather, regrows new set each year. Popular basket plant. Origin: Malaysia, New Guinea, Indonesia.

24. *Woodwardia orientalis*

Chain fern. Terrestrial. Clump forming. Long

fronds tend to sag. Chains or rows of sori. Visible on top surface. Produces plantlets on the pinnae all along fronds. Origin: Japan, Taiwan.

25. *Sphaeropteris cooperi*

Australian treefern. Terrestrial. Semitropical. The most common treefern grown in San Diego. Lots of examples at zoo in all stages of development. Characterized by tall trunk, many brown scales on stems and new fiddleheads. Broad spreading canopy. Two rows of sori on each pinnule. Coin spotted trunk. Origin: Australia.

26. *Cyathea medullaris*

Black treefern. Terrestrial. Temperate to semitropical. Noted for large size of canopy and very black scales covering trunk and fronds. Origin: New Zealand, Fiji, Polynesia.

27. *Nephrolepis cordifolia*

Sword fern, sun fern. Terrestrial or epiphyte. Erect fronds with close set leaflets. Fronds form in clusters, send out stolons which develop secondary clusters and form a dense growth. Sori are crescent-shaped. Has water holding tubers underground. Origin: Pantropical.

28. *Nephrolepis exaltata*

Sword fern. Terrestrial or epiphyte. Very similar to *N. cordifolia*. Fronds may vary exceedingly. Parent of all sorts of variants in the "Boston-type." Does not have tubers underground. Origin: Florida, Mexico, Brazil, West Indies.

29. *Microlepia strigosa*

Terrestrial. Graceful arching fronds grow in a slowly spreading clump. Fronds are tapered, bi-to-tri-pinnate with lacy appearance. Cuplike sori. Protect from frost. Origin: India, Malaysia, Japan, Sri Lanka, Polynesia, China.

30. *Angiopteris evecta*

Giant fern. Huge heavy fronds arch from rounded trunk. Often found close to streams. Acidic soil, shade, space required for cultivation. Origin: Malaysia, Polynesia, New Guinea, Australia.

31. *Blechnum occidentale*

Hammock fern. Terrestrial. Pinnate fronds grow to about 1 foot high and form a ground cover. New foliage is rosy or salmon colored. Tropical to semitropical. Origin: South America, Mexico, West Indies.

32. *Polypodium (Goniophlebium) subauriculatum*

Epiphyte to terrestrial. Long pendant feathery pinnate fronds. Tropical to temperate climate. Good basket plant. Origin: North India, China, Malaysia, New Guinea, Australia.

33. *Hypolepis tenuifolia*

Soft ground fern. Terrestrial. Tropical to temperate. Soft foliage arching gracefully. Wide creeping plants tend to be pretty but invasive. Origin: Australia, New Zealand, Philippines, Polynesia.

Nephrolepis oblitterata 'Kimberley Queen.' Terrestrial. Similar to *N. exaltata*. Darker green foliage forms lush clumps. Less problems with watering than "Boston" ferns. origin: Australia.

On both The Tiger River Trail and Fern Canyon, many of the species are repeated along the trail. The specimens noted above are for identification and undoubtedly you will be able to spot many others of the same species.

Around the pool next to the Rondavel the following ferns can be seen: *Todea barbara*, *Nephrolepis cordifolia*, *Woodwardia orientalis*, *Dryopteris erythrosora*, *Hypolepis tenuifolia*.

Organizations that are available locally should you wish to join other avid fern hobbists in their quest for plants and knowledge of fern culture:

San Diego Fern Society

Casa del Prado, Balboa Park - 7:30 p.m.

Meetings the third Thursday of every month

Los Angeles International Fern Society

Dave Fay, P.O. Box 90943

Pasadena, California 91109-0943k

References:

Fern Growers Manual

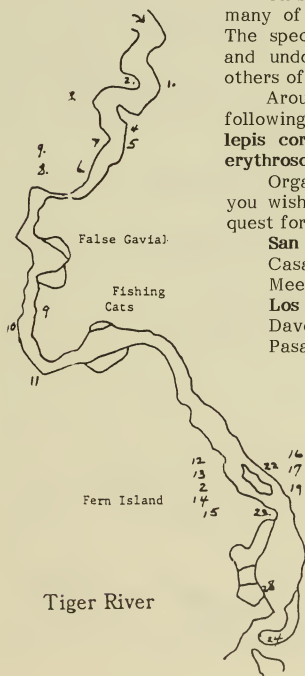
Hoshizaki, Barbara Joe

Alfred A. Knopf, Inc.

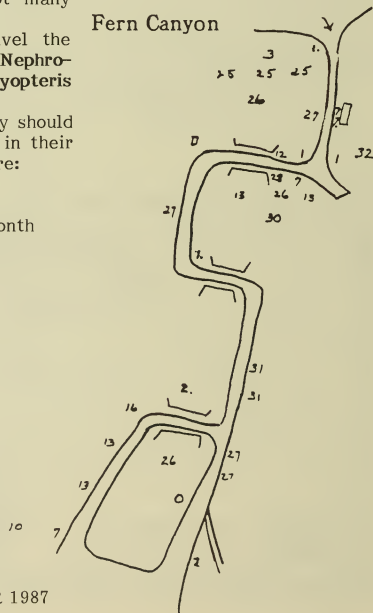
Encyclopedia of Ferns

Jones, David L.

Timber Press, Portland, OR 1987



Fern Canyon



OTHER GARDEN CLUBS WHICH DO NOT BELONG TO SAN DIEGO FLORAL ASSOCIATION

AMERICAN HIBISCUS SOCIETY

ROSS GAST SOCIETY

Angus Graham 758-04733
6449 Via de la Reina
Bonsall CA 92003

AMERICAN IVY SOCIETY

CALIFORNIA CHAPTER
Pres: Yolanda de Silva (818) 918-2731

Rancho Los Pirules
16005 Fellowship Road
Valinda, CA 91744

AMERICAN SOCIETY OF LANDSCAPE

ARCHITECTS, SAN DIEGO CHAPTER
Pres: Mr. Keith D. Simon (619) 232-0404

516 Fifth Ave., San Diego, CA 92101

ATWATER GARDEN AND CAMELLIA SOCIETY

Pres: Lyman Duncan (209) 358-2231
P.O. Box 879

Atwater, CA 95301
2nd Thurs., Atwater Library Conference Room

Third & Grove St., Atwater, CA

AZALEA SOCIETY OF AMERICA INC.

Pres: John U. Rochester, Jr.

P.O. Box 6244

Silver Spring, MD 20906

CALIFORNIA CHERIMOYA ASSOCIATION

P.O. Box 4818

Saticoy, CA 93004

CALIFORNIA MACADAMIA SOCIETY

Pres: Jim Russell

P.O. Box 1290

Fallbrook, CA 92028

4th Sat (Except Jun & Dec) at Circle R Golf
Resort 8 a.m.

CALIFORNIA RARE FRUIT GROWERS

SAN DIEGO CHAPTER

Pres: Robert Holzinger (619) 452-7963

3054 Fried Avenue, San Diego, CA 92122

4th Thurs., Casa del Prado, Balboa Park 7 p.m.

CHANNEL ISLANDS BRANCH,

NATIONAL FUCHSIA SOCIETY

Pres: Charles Kraft (805) 525-8940

118 Salas Street

Santa Paula, CA 93060

2nd Wed., Ventura County Fairgrounds,

Ventura 7p.m.

COSTA MESA-BAY CITIES BRANCH

NATIONAL FUCHSIA SOCIETY

Pres: Charles Laudenberger (714) 540-9669

3145 Yukon Ave., Costa Mesa, CA 92626

3rd Wed. Golden Timers Senior Citizen Center

114 E. 19th St., Costa Mesa 7:30 p.m.

DESCANSO GARDENS GUILD, INC.

P.O. Box 778

La Canada, CA 91011

DOWNEY BRANCH

NATIONAL FUCHSIA SOCIETY

Pres: Fred S. Hugill Jr. (213) 867-6755

9440 Nichols, Bellflower, CA 90706

2nd Wed., Alameda School Cafeteria

8613 E. Alameda, Downey 7:30 p.m.

EPIPHYLLUM SOCIETY OF AMERICA

Pres: Richard Pemtco Jr.

P.O. Box 1395

Monrovia, CA 91017

1st Tue. Los Angeles County Arboretum

Arcaida 7:30 p.m.

FALLBROOK GARDEN CLUB

Pres: Mrs. Stanley Paine 723-9179

159 Orvil Way

Fallbrook, CA 92028-2539

Last Thurs. except 3rd Thurs. Oct, Nov,

Dec. St. Peter's Church 10 a.m.

GARDEN GROVE BRANCH

NATIONAL FUCHSIA SOCIETY

Pres: Jeanette Clapp (714) 536-2603

1210 Main St., Huntington Beach, CA 92648

1st Tue. Women's Civic Club

9501 Chapman Ave., Garden Grove

7:30 p.m. Coffee Social

8 p.m. Meeting

GOLDEN STATE BONSAI FEDERATION

966 Pomeroy Ave.

Santa Clara, CA 95051

INDOOR CITRUS AND RARE FRUIT

SOCIETY

Pres: Walter Doty (415) 948-3171

176 Coronado Avenue

Los Altos, CA 94022

No meetings.

INTERNATIONAL PALM SOCIETY

Box 368

Lawrence, Kansas 66044

LA CANADA GARDEN CLUB

Pres: Mrs. William Pickering (818) 790-1235

292 St. Katherine Drive

La Canada Flintridge, CA 91011

2nd Fri. Homes of members 7:45 P.M.

LOS ANGELES BRANCH

INTERNATIONAL GERANIUM SOCIETY

Pres: Betty Tufenkian

4810 Druid St., Los Angeles, CA 90032

MARIGOLD SOCIETY OF AMERICA

Box 112

New Britain, PA 19001

MISSION GARDEN CLUB

Pres: Mrs. Vera Eimer 447-8029

1285 W. Washington Ave. Sp 109

El Cajon, CA 92019

1st Wed. North Park Recreation Center

San Diego 1:30 p.m.

NORTH COUNTY CHAPTER OF THE

CALIFORNIA RARE FRUIT GROWERS

Daryl Ferguson (619) 758-5213

NORTH COUNTY SHADE PLANT CLUB

Pres: Mrs. Drussilla C. Luers 439-3677

1635 Mt. View Avenue

Oceanside, CA 92054

3rd Sat. Senior Center, 455 Country

Club Lane, Oceanside, CA 1p.m.

ORANGE COUNTY CACTUS AND

SUCCULENT SOCIETY

Nan Bearden (213) 698-1346

8846 So. Calmase Avenue

Whittier, CA 90605

4th Thurs. at Yorba Linda Library,

18262 Lemon Dr., Yorba Linda

PACIFIC ROSE SOCIETY

Marie Wood

323 Genoa, Apt. E

Arcadia, CA 91006

1st Thurs. (Oct. thru June) Los Angeles

County, Arboretum, Arcadia

PALM SOCIETY SOUTHERN

CALIFORNIA CHAPTER

Walt Frey

25372 Calle Becerra

Laguna Niguel, CA 92677

\$4. Membership, but must belong to

international.

QUAIL BOTANICAL GARDENS FOUNDATION

INC.

Pres: Miss Mariette Pinchart 753-4086

1601 Burgundy Road

Encinitas, CA 92024

RAMBLING GARDENERS GARDEN CLUB

Pres: Mrs. A. J. Huhlig (714) 544-1617

11978 Red Hill Ave.

Santa Ana, CA 92705

3rd Mon. Fullerton Savings & Loans Assn.,

12860 Euclid Ave., Garden Grove, CA 1 p.m.

RANCHO BERNARDO SEVEN OAKS GARDEN

CLUB

Pres: Mrs. Eloise Heller (619) 451-0456

16862 Pinata Drive, San Diego, CA 92128

SAN DIEGO BROMELIAD SOCIETY

Pres: Mr. Tim O'Reilly 670-0830

10942 Sunray Place

La Mesa, CA 92041

1st Thurs. Byzantine Catholic Church

2235 Galahad Road, Serra Mesa 7:45 p.m.

SAN DIEGO BULB SOCIETY

Pres: Cynthia Drake (619) 271-8933

11121 Saunders Court

San Diego, CA 92131

2nd Thurs. Standley Park and Recreation Center

3585 Governor Drive, University City 7 p.m.

SAN DIEGO COUNTY HERB SOCIETY

Pres: Mrs. Eleanor Kimes 484-3653

13021 Trail Dust Avenue

San Diego, CA 92129

2nd Sat. Home of members 11 a.m. except Jan, Jul & Aug.

SAN DIEGO DAYTIME AFRICAN VIOLET SOCIETY

Pres: Betty Roberson (619) 729-6772

3612 Laredo Drive, Carlsbad, CA 92008

SAN DIEGO GUITO GARDEN CLUB

Pres: Mrs. Hans Kaspar

1905 Hummock

Encinitas, CA 92024

SAN FERNANDO VALLEY ROSE SOCIETY

R. Weeks (818) 884-9819

3rd Tue. Mercury Savings, 5201 Laurel Canyon Blvd

North Hollywood 7:30 p.m.

SANTA ANA GARDEN CLUB

Pres: Mrs. Merrell Kent (714) 545-2495

2120 Woodland Place

Santa Ana, CA 92707

2nd Thurs. (Sept. thru June) Pomona First Federal

Savings & Loan, 17851 Seventeenth St., Santa Ana

9:30 a.m.

SEA CLIFF GARDEN CLUB

7138 Lantana Terrace

Carlsbad, CA 92009

SOUTH BAY ORCHID SOCIETY

Narie Dressler (213) 832-2767

1909 West 27th St., San Pedro, CA 90732

SOUTH COAST BRANCH

NATIONAL FUCHSIA SOCIETY

Pres: Louise Walker (213) 8315237

1018 Via Cordove, San Pedro, CA 90732

2nd Mon. South Coast Botanic Gardens

26300 Crenshaw Blvd., Palos Verdes Pen. 9:30 a.m.

SOUTH COAST ORCHID SOCIETY, INC.

(213) 4369767

4th Mon. Whaley Park Community Center

5620 Atherton St., Long Beach 8 p.m.

SOUTHERN CALIFORNIA CHAPTER INTERNATIONAL

PALM SOCIETY

c/o Walt Frey

25372 Calle Becerra

Laguna Niguel, CA 92677

SOUTHERN CALIFORNIA HORTICULTURAL INSTITUTE

P. O. Box 49798 Barrington Station

Los Angeles, CA 90049

2nd Thurs. Friendship Hall, (Los Angeles Breakfast Club)

3201 Riverside Drive, Los Angeles 7:30 p.m.

SUCCULENT AND CACTUS SOCIETY

Pres: Richard Bernard (415) 752-5334

775 Cole St. no. 1

San Francisco, CA 94117

7 p.m. 3rd Tues. San Francisco County Fair Bldg

(A.K.A. Hall of Flowers) 9th & Lincoln Way,

San Francisco, CA

THE HOYA SOCIETY INTERNATIONAL, INC.

Christine M. Burton

Box 54271

Ahuliga, CA 93038

THE BONITA ORGANIC GARDEN CLUB

Marguerite Stone (619) 462-3068

539 Via Picante

La Mesa, CA 92041

3rd Tues Valley Vista Elementary School

3724 Valley Vista Way, Bonita

THE HORTICULTURAL SOCIETY OF ORANGE

COUNTY

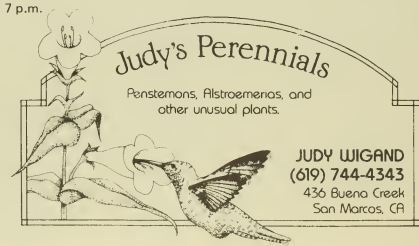
Leslie B. Knox (714) 494-4403

360 Jasmine Street

Laguna Beach, CA 92651

3rd Tues. Sunkiss Public Library

901 Sunkist Street, Anaheim, CA



This free listing is
published each year
in the JULY/AUG.
issue. To be listed,
notify the editor
prior to May 1 of
each year.



Book Reviews

BOOK REVIEW by Harry W. Tolen

THE WEEKENDER'S GARDENING MANUAL by Patricia A. Taylor. Published by Henry Holt and Company, 115 West 18th Street, New York, NY. 143 pages. 6" x 9". Softcover. 1989. \$12.95.

This is well done little book. A book of gardens planned especially for the people who can't devote their whole life to the garden. This is aimed at gardens you can take care of with less than two hours attention a week, maybe even less, and still get the maximum of productivity. The book is well thought out, very clear explanations of what and why. I especially like the color illustrations of the planned garden. What it will look like every three months or so. The last portion of the book is devoted to beautiful full color pictures of Appendix A, "Plants You Definitely Want To Consider", another, Appendix B, "Plants You Might Want To Take A Chance On", and Appendix C, "Plants You Should Probably Avoid." (no pictures in this last section, why bother?) Very good data.

SHEPHERD'S PURSE ORGANIC PEST CONTROL HANDBOOK - by Pest Publications - Available from The Book Publishing Company, Summertown, TN. 38483 - 1989. 52 pages, 14x22 cm, Softcover, \$5.95.

A small, very interesting book with all the common pests of gardens and houses pictured. The book describes each, the life cycle, and three methods of control, biological, cultural and what to do for a severe or "acute" condition. Biological control might be another predatory mite, nematode or insect; cultural might suggest other things to plant in the garden which will help control your problem indirectly or perhaps some additions of various types of mulch or liquids like pepper juice you might apply around the plants. Acute gives you a method to "Nuke 'em!!!" I definitely want one of these books. Some color and good big pictures of all of the bugs.

FLOWER GARDENS OF VICTORIAN ENGLAND - by Andrew Clayton-Payne, Available from Rizzoli International Publications, Inc., 597 Fifth Avenue, New York, NY 10017 - Hardcover - 160 pages - 9" wide x 6" high - \$27.50. All color reproductions of paintings.

An absolutely superb collection of pictures of paintings of 19th century gardens in England. Sorry, no Dali here. These are almost like having camera pictures. The paintings are in collections

all over England. All were done in the heat of the Victorian Garden era, between 1820 and 1850. Each garden is pictured at it's absolute best, something only a painter can do. This will make a fine book for your collection, good reading, well done, a class act. Excellent value for the money!

CLEMATIS - by Christopher Lloyd, Revised with Tom Bennett - Revised and enlarged from a book originally published in England in 1965 - 6" x 10" - 216 pages - Hardcover - \$32.50 - Available from Capability's Books, Box 114 Highway 46, Deer Park, Wisconsin 54007

An attempt to update a book published many years ago. The writing style is good, but the book still looks like a book published in 1965. You know, three little groups of color pictures, 12 pages of them in all. Lots of text, good as it is, is just not very entertaining without a picture close by. In all, over 280 garden worthy species, varieties and hybrids are described. How good can you describe a beautiful Clematis? Words are very tough to find. One picture is worth ... well 12 pages of these pictures is not worth \$32.50 unless you just have to have 80 more descriptions of clematis! Nice cover, I think that's the best update.

CLEMATIS - by Barry Fretwell - 8" x 10 1/2" - \$24.95 - Available from the same publisher as the previously reviewed clematis book above. 160 pages. Color on almost every page.

Boy, when you wanted to find a book on clematis you couldn't find one, now two pop up at once. Of the two, since I'm given a choice, I much prefer this one. Nice colored pictures on almost every page, next to the writeup about each particular plant. Text tells all you could want to know for breeding purposes, and a little background on the plant if possible. Almost 200 clematis are described. Better value for the money.



HILLTOP
Nursery

Open 7 days

8:00-5:00

436-0928

Select from hundreds of exotic palms,
scheffleras, dracaenas, cycads and more.

Thousands of hanging baskets and
flowering plants to add beauty and
color to your yard and patio.



I-5 to La Costa Ave.
East to Frontage Rd.
South 3 blocks to Sparta.



NOW IS THE TIME...



A CULTURAL CALENDAR OF CARE FROM OUR AFFILIATES

Compiled by Penny Bunker

AFRICAN VIOLETS Helen LaGamma

- keep** violets well groomed, don't crowd them.
- keep** area clean, wipe down growing area with a mild solution of lysol and water.
- place** pans of wet pebbles among plants; this creates the needed humidity.
- spray** plants with warm water - warm water prevents shocking the plants.
- use** cool light tubes. If using natural lighting, place the plants a little farther away from the source.
- use** a fan to circulate the air; this is important to prevent mildew.
- maintain** a clean growing area, circulate the air, and use the pans of wet pebbles. Your African violets will then weather even the hottest summer.

BEGONIAS Margaret Lee

- check** for mildew - spray at once for control.
- repot** if needed - step up to next size of container.
- make** cuttings of material removed in grooming plants.
- pot** rooted cuttings and leaves.
- check** for pests: snails, slugs, and fungus.
- feed** tuberous begonias with Hi-Bloom or fish emulsion; use one tablespoonful to one gallon of water.

BONSAI Dr. Herbert Markowitz

- keep** bonsai damp. Warm days require they be watered several times a day, if weather is hot and dry.
- move** some plants so they get only half day sun.
- check** for insects and pests; spray with diluted spray.
- mist** or spray foliage of certain bonsai in the evening or early morning.
- wait** until September or October to transplant bonsai.

BROMELIADS Mary Siemers

- protect** plants from burning by keeping them under trees, shade cloth, lath, clear fiberglass, or any material that will provide plenty of filtered sunlight. Plants with sharp, serrated leaves can take some direct sun.

BROMELIADS Mary Siemers

- protect** plants from burning by keeping them under trees, shade cloth, lath, clear fiberglass, or any material that will provide plenty of filtered sunlight. Plants with sharp, serrated leaves can take some direct sun.
- water** as often as the temperature in your area requires, but provide good drainage, and never allow the soil to be soggy.
- maintain** humidity by wetting surrounding areas. Humidity is important in the well-being and growth of bromeliads.
- cut** off shoots (pups) during warm weather for faster and healthier growth. Best when they are 1/3 or 1/2 size of mother plant.
- continue** a monthly fertilizing schedule throughout the warm weather with a water soluble fertilizer, preferably high in acid, using 1/2 the recommended strength.

CACTUS AND SUCCULENTS Verna Pasek

- water**, soaking the soil evenly is better for potted plants, as well as for those in the ground.
- plan** windbreaks to help conserve water and protect new growth from wind and sun-burn.
- make** grafts as union will take place better in warm weather.
- feed** with a balanced fertilizer for new growth and beautiful blooms.
- protect** against snails and slugs. Try stale beer in jar lids placed in the garden.
- repot** any pot-bound plants.
- root** cuttings and offsets.

CAMELLIAS E. C. Snooks

- feed** for the second time with cottonseed meal, or other commercial acid fertilizer, feeding again in 6 - 8 weeks.
- continue** watering on a regular basis. Don't let the roots dry out completely. Roots must be kept damp, but not wet.
- consider** a mulch of redwood compost or other suitable material, such as pine straw, to keep the root zone cool and moist.
- apply** iron along with the fertilization.
- prune** out unwanted new growth before it becomes established.
- keep** the center of the plant open for air circulation.
- check** for pests such as aphids, looper worms, or mites, and use appropriate spray.

DAHLIAS Abe Janzen

continue regular watering program.
tie canes to prevent plants from breaking.
 Use one loop for each cane.
disbud to encourage better blooms.
spray for insects and mildew; keep slugs and snails away.
feed with a 5-10-10 fertilizer. Use of potash alone will help promote root growth.
keep old blooms cut back to first set of leaves from the main stalk to prolong blooming.
cut blooms in late afternoon or early evening; then place in water immediately.

EPIPHYLLUMS

repot plants that have outgrown their containers.
take new cuttings during the warm weather.
keep plants out of the full summer sun; they need filtered sunlight and free air movement.
watch moisture. Spraying to mist is beneficial during hot dry weather. Spray during evening hours or early morning.
watch for pests. Spray or drench plants with Cygon to control.
fertilize for new growth. Use 10-10-15 strength at this time.

FERNS Ray Sodomka

spray for aphids and scale; keep snails, pillbugs and slugs under control.
fertilize plants regularly as they are in their growing period. Use a high nitrogen fertilizer.
water and maintain humidity by keeping the surrounding areas damp.
trim dead fronds.
plant fern spore.
check that hot sun is not breaking through saran or lath.

FUCHSIAS William Selby

spray to control insects. Orthene will control most species of pests: aphids, leafhoppers, caterpillars, and leaf miners. It seems effective against the flower pests: thrips, scale, whitefly, mites, and mealybugs.
snip off those runners for shape and new growth.
prune lightly to encourage more blooms in fall.
keep the foliage misted. Spray only in the shade or early evening.
watch not to overwater. Keep damp, but not wet.
fertilize regularly with high-phosphorous for buds and blooms.
keep spent blooms and seed pods picked off for more and larger blooms.

keep all leaves, blossoms, and other trash cleaned up to prevent fungus and disease.

GERANIUMS Carol Roller

water thoroughly when plants become relatively dry. Each watering should moisten the entire soil ball. Excess water should drain away. Keep foliage as dry as possible.
continue feeding a balanced fertilizer dissolved in water using less than the recommended strength, as often as needed to keep plants from developing nutritional deficiencies. Long term pellets may be used instead.
continue pest and disease control using products according to the manufacturer's directions.
groom plants, removing discolored leaves and faded flowers. The long bloom stalks on regals and scented should be cut away with a sharp blade.
take cuttings from zonals and ivy-leaf types, if desired. Each cutting should have a healthy growing tip
protect tender plants from the sun, if temperatures are high. Move to a sheltered spot or create overhead shade.
continue to rotate plants on a regular basis in order to keep them well-shaped.

GESNERIADS Michael Ludwig

keep plants blooming by removing all spent blossoms.
take proper action against pests.
water regularly; do not allow to dry out as it will bring dormancy to achimenes.
protect plants from direct sun. Try to keep at temperatures below 80 - 85 ° F. as these plants suffer from the extremes.

IRIS

divide and replant tall-bearded iris discarding old spent rhizome.
dust ends of rhizome with soil sulphur.
work humus into the soil to revitalize before replanting.
feed those plants left in the ground with a good fertilizer to promote strong growth.
keep iris beds clean and free of old fans and weeds.
watch for aphids; use a light insecticide or a systemic.
cut off spuria foliage, but do not dig until September.

ORCHIDS Charlie Fouquette

check heat and light intensity in glass houses, patios, or shade areas.
give all orchids plenty of air movement.
keep outdoors and shade house areas moist;
watch and be prepared for hot dry winds

(no rain in sight).

- not** be fooled by overcast skies or low clouds. Plants will still need misting.
- keep** the plants in the orchid alliance cool.
- give** cypripediums plenty of water and sunlight, but don't let burn.
- keep** small botanicals cool and misted, out of hot drafts.
- keep** cypripediums and paphiopediliums moist, but not wet. Repot after blooming.
- moisten** phalaenopsis seedling and other small vandaceous plants regularly. Plant offshoots of dendrobiums that are two inches long or more.
- make** Cattleya divisions; be sure to tag the plants.
- feed** dendrobiums with 30-10-10 fertilizer; cypripediums and Cattleyas need high-nitrogen fertilizer (30-20-20).
- remember** bark requires more nitrogen (the bark absorbs nitrogen). Other types of mixes require less nitrogen, as a 20-20-20.
- not** forget red spider, scale, or snails. Use malathion for snails, Malathion and Orthene for red spider. Check with your local nursery to be safe.

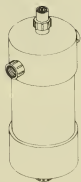
ROSES Frank Hastings

- feed** with a balanced fertilizer once a month, watering the day before

Simply the Best !

“ADD-IT”

Automatic Fertilizer Injector



Simple to install. Simple to use. Compact. No moving parts, and no electricity required. Just fill the tank, and each time you irrigate, you fertilize. *And oh, the results...* “ADD-IT”. It's simple.

That's why it's the best!



TFS SYSTEMS

A division of Trickle Soak Systems

8733 Magnolia Ave., Suite 100 • Santee, CA 92071
(619) 449-6408 FAX (619) 449-2368

- fertilizing. Water in dry fertilizers.
- spray** with a mixture of Orthene and Funginex weekly to prevent mildew, rust, and thrips from discoloring your blooms. Water the day before to prevent leaf burn.
- wash** under every leaf with a jet stream of water to dislodge any spider mites. Do this weekly, the day before you spray.
- water** at least twice a week 18 inches deep. Water every other day if temperatures reach 90° F.
- keep** spent blooms pruned.
- prune** off twiggy growth in August for better Autumn bloom.
- keep** rose bed clean of weeds and fallen leaves.
- bring** your mulch back to 2 inches deep, if dissipated.

VEGETABLES

- prepare** soil for fall planting by digging and mixing organic amendments.
- set** out plants of eggplant, celery, peppers, and tomatoes.
- plant** seed of snap beans, summer squash, cucumber, corn, carrots, beets, radish, and lettuce for late fall harvest.
- irrigate** deeply by furrows, by flooding, or by drip method.
- harvest** vegetables frequently while they are young and quality is best.



CHULA ORCHIDS
230 CHULA VISTA STREET
CHULA VISTA, CA 92010
PHONE 420-0746

ORCHIDS FROM AROUND THE WORLD
SPECIALIZING IN ORCHIDS THAT WILL GROW
OUTSIDE HERE IN SOUTHERN CALIFORNIA.

GREENHOUSE EQUIPMENT
AUTOMATIC HUMIDITY & WATERING SYSYS.
HEATER REPAIRS AT OUR SHOP
DISTRIBUTOR FOR J. M. MC CONKEY
POTS & GROWER SUPPLIES, OSMOCOTE,
GROW MORE FERTILIZERS, MAG-AMP

BOOKS
ORCHID BOOKS OF ALL KINDS
CARNIVEROUS PLANT BOOKS
BONSAI & PENJING BOOKS
ARIDS, TROPICALS, & FERN BOOKS
TILLANDSIAS & OTHER BROMELIADS
TILLANDSIA ionanthas - 10¢ EACH GROWTH
CUT FLOWERS & FOLIAGE
DENDROBILIUMS & ANTHURIUMS FOR THE
FLORIST TRADE AT WHOLESALE PRICES

OPEN 9 TO 5 MON, TUES, THURS
FRI & SAT - CLOSED WEDNESDAY
(SUNDAYS PLEASE CALL FIRST)

Floral Design - An Art Form

By Velma West

HELPFUL HINTS ABOUT STEMS

To brace a heavy branch, insert it at a slant on a needleholder then place beside it and with a hammer, if necessary, a short green stake of another branch. Wire them together or use a twist-em.

To make thin stems stronger, bunch three or four stems together and tie with a thin wire and insert them as one.

To make hollow stems obtain a better hold, insert a heavy wire or a piece of iris, gladiolus or other stalk into the hollow stem.

To make a droopy headed flower stay up, make a small fishhook in the end of a wire, insert it until the fishhook touches the blossom. Wrap the wire around the stem for a short distance or the entire length of the stem.

For fleshy stems that curl, ie.: callas, wrap the lower end with floral tape or a twist-em, being careful not to plug the stem so that it cannot draw water.

To give s.o.s. treatment to a bent stem, insert a wire.

A broken stem can be repaired by splinting

it, then wrap with floral tape.

To bend hollow stems, insert a wire as far as the flower head.

To bend a solid stem, insert the wire into the head of the flower, wrap the wire around the stem and gently bend.

A heavy stem or branch can be bent by grasping it between your hands with the thumbs touching and bend gradually, moving the hands slowly down the stem while manipulating the stem. If your hands spread apart while bending, the branch is likely to snap. This procedure takes practice.

To impale a woody stem, make a crisscross cut in the end as deep as the length of the needles of the holder and push onto it.

To angle a stem, heavy or thin, insert it in an upright position, then exert it down into the desired position.

To force woody tough stems onto a holder for fastening fruit and vegetables, tap with a hammer.

Cut stems, whenever possible, on an angle to provide a larger surface for drawing water.



- Stores water and adds fertilizer.
- Helps control overwatering.
- Fewer waterings needed.
- Reduces soil compacting.

SOIL MOIST PLUS™ works unlike any other product to time release both water and fertilizer into the soil. It absorbs excess water similar to a sponge. When the surrounding soil becomes dry, the product discharges the water and fertilizer into the soil as needed.

Available in granules or spikes. Granules come with or without fertilizer and are available in bulk containers.

Write or call for free fact sheet.



JRM Chemical Division
13900 Broadway Avenue
Cleveland, OH 44125
1-800-962-4010

PATCHES AND POTS

*Give Your Violets A Lift
With
Elisa's African Violet Rings*

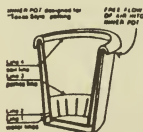
583 El Cajon Blvd.,
El Cajon, CA 92020
(619) 442-7037

WHOLESALE DISTRIBUTORS FOR VIOLET
SUPPORT RINGS AND OYAMA PLANTERS



1. Keeps leaves from getting cut on pot edges.
2. Plants cannot hug pot.
3. Show plants are easier to train.

OYAMA 'TEXAS STYLE' PLANTERS®



1. Little or no watering skill required.
2. High quality, shatter proof plastic with textured finish.
3. Approved for shows by African Violet Society



PLASTIC RESERVOIRS
available for the
Miniaturizing Mini Pot

BUSINESSES AND CLUBS SEND FOR WHOLESALE PRICE LIST.

MASTERCARD and VISA accepted

Retail List Available

SAN DIEGO FLORAL ASSOCIATION & GARDEN CENTER

Under the sponsorship of the Park & Recreation Department, City of San Diego.

Meetings: 3rd Tuesday, February, April, June, October.
Casa del Prado, Balboa Park, San Diego, California

OFFICERS

President
Jo Rathmann 420-6468
240 Chula Vista Street
Chula Vista, CA 92010

1st Vice President
Frances Clare

2nd Vice President
Pat Kastama

Treasurer
Nancy Cottingham

Recording Secretary
Barbara S. Jones

Corresponding Secretary
Jeanne Johns

Office/Financial Secretary
Tillie Marcus
Mimi Pope

Past President
Vernice Putman

DIRECTORS
Term 1987-1990
Barbara Pruynne
Harry Tolen
Donald Boyer

Term 1988-1991
Cynthia Drake
Roy Jones
Kathy Walsh

Term 1989-1992
Lynn Beyerle
Milton Sessions
Lois Vaiana

HONORARY LIFE MEMBERS
Samuel Hamill
Ailette Macdonald
Polly Whigham
Elizabeth B. Glover

BOUQUET WORKSHOP
Peg Walker

COMPUTER OPERATOR
Lynn Beyerle

EDITOR, CALIFORNIA GARDEN
Elizabeth B. Glover 264-6769

FLOWER ARRANGERS GUILD
Mrs. William J. Walsh 298-5182

HISTORIAN
George Herring 421-6897

HOSPITALITY
Kathy Walsh 296-8429

HOST & HOSTESS
Vernice Putman 749-9587

LIBRARIAN
Elsie Topham 297-2167

PUBLIC RELATIONS
Mary Jordan 222-7665

TOURS
Helen Gagliardi 449-1648
Christina ON THE PRADO
Vernice Putman 749-9587

PROPERTIES
George Frank 421-6897

AFFILIATE MEMBERS

ALFRED D. ROBINSON BANCH
AMERICAN BEGONIA SOCIETY

Pres: Mary Zemcik 223-6439
4157 Catalina Place
San Diego, CA 92106
2nd Tues. Home of Members, 10:30 a.m.

AMERICAN BAMBOO SOCIETY
Pres: Mr. Richard A. Haubrich 481-9869
Box 640
Springville, CA 93265

AMERICAN BEGONIA SOCIETY
Pres: Arlene Davis
157 Monument
Rio Dell, CA 95562-1617

AMERICAN DAHLIA SOCIETY INC.
Memb. Chmn: Michael Martinovich
(516) 742-3890
159 Pine Street
New Hyde Park, NY 11040

BALBOA PARK AFRICAN VIOLET SOCIETY
Pres: Helen LaGamma (619) 466-3793
7844 Circle Dr., Lemon Grove, CA 92045
Dessert 6:30; Meeting 7 p.m.

BERNARDO GARDENER'S CLUB
Pres: Mrs. F. Neal Fugate 485-8278
17888 Via Altiva
San Diego, CA 92128

BROMELIAD STUDY GROUP OF
BALBOA PARK
Pres: Wayne Siemers 284-2813
4614 Constance Dr., San Diego, CA 92115
2nd Tues., Casa del Prado, Rm 104, 7:30 p.m.

CALIFORNIA ASSOCIATION OF NURSERYMEN
SAN DIEGO CHAPTER
Pres: Ted Kniffing 561-8320
14940 Oak Creek Road
El Cajon, CA 92021
4th Wed., 7 p.m. Place varies

CALIFORNIA COASTAL ROSE SOCIETY
Pres: Steve Marvin 433-2454
P.O. Box 133, Carlsbad CA 92008
3rd Tues. Calavera Hills Community Center
Carlsbad — 7 p.m.

CALIFORNIA NATIVE PLANT SOCIETY
SAN DIEGO CHAPTER
Pres: Ms. Bobbie Steele 563-7708
4495 32nd St., San Diego, CA 92116
3rd Tues., Casa del Prado, 7:30 p.m.

CHULA VISTA GARDEN CLUB
Pres: Mrs. Lucy Morrissey
P.O. Box 5447
Salton City, CA 92275
3rd Wed., Rohr Pk Manor, Sweetwater Rd.
Bonita, 1:00 p.m.

CITY BEAUTIFUL OF SAN DIEGO INC.
Pres: Mrs. Ruth C. Smith 488-0830
4995 Fanuel Street
San Diego, CA 92109
1st Mon. S.D. Zoo, Rondavel Rm., 11:30 a.m.

CONVAIR GARDEN CLUB
Pres: Mrs. Virginia Soderberg 582-7098
6197 Arno Drive
San Diego, CA 92120
1st Wed., Casa del Prado, 7:30 p.m.

CORONADO FLORAL ASSOCIATION
Pres: Oliver D. Compton 435-1723
P.O. Box 89
Coronado, CA 92118
Twice annually at call of President
1113 Adella Ave., Coronado, 7:30 p.m.

CROWN GARDEN CLUB
Mrs. William G. Williams 435-3985
821 Coronado Avenue
Coronado, CA 92118
4th Thurs., Coronado Library, 9:00 a.m.

DOS VALLES GARDEN CLUB
Pres: Mr. John Jacobelli 749-3303
26756 Banbury Drive
Valley Center, CA 92082
2nd Tues. (except July and August)
Valley Center Community Hall
Litae Road & V&V Center Rd., 1:00 p.m.

EAST COUNTY ROSE SOCIETY
Pres: Martha Epler 579-6123
864 Sycamore Lane
El Cajon, CA 92019
1st Sun., various gardens, 2:00 p.m.

EXOTIC PLANT SOCIETY
Pres: George Plaisted 583-9551
6356 Delbarton
San Diego, CA 92120
4th Tues., Wells Rec Center
1235 E. Madison, El Cajon, CA 7:30 p.m.

FLEUR DE LEAGUE GARDEN CLUB
Pres: Mrs. Robert K. Smith 457-3066
3270 Caminito East Bluff No. 95
La Jolla, CA 92037
2nd Mon., Home of Members, 10:30 a.m.

GROSSMONT GARDEN CLUB
Pres: Mrs. Dolores Smith 464-2457
7443 Orient Avenue
La Mesa, CA 92041
2nd Mon. 4975 Memorial Drive
La Mesa, CA 92041 9:30 a.m.

HEARTLAND AFRICAN VIOLET SOCIETY
Pres: Kemary Crowder 271-1844
8862 Shaula Way, San Diego, 92126
3rd Thurs. Wells Park
1153 East Madison, El Cajon 7 p.m.

ICHIYO SCHOOL OF IKEBANA
SAN DIEGO CHAPTER
Pres: Mrs. Haruko Crawford 660-2046
10411 San Carlos Drive
Spring Valley, CA 92078

IKEBANA INTERNATIONAL
CHAPTER 119
Pres: Mrs. Rex (Kay) Yarnell 435-0910
501 Country Club Lane, Coronado, CA 92118
4th Wed., except July and Aug.
Casa del Prado, 10:00 a.m.

IKENOBOKO CHAPTER OF SAN DIEGO
Pres: Mrs. Charles Oehler 78-5689
2822 Walker Drive
San Diego, CA 92123

INTERNATIONAL AROID SOCIETY
Pres: Bruce McManus (305) 271-3767
11691 SW 93 Street
Miami, FL 33176

LA JOLLA GARDEN CLUB
Pres: Mrs. Robert M. Boynton 481-0263
376 Bellaire Street
Del Mar, CA 92014
3rd Tues., La Jolla Woman's Cl., 1:30 p.m.

LAKE HODGES NATIVE PLANT CLUB
Pres: Dorris Baur 487-6614
16516 Gabarda Road
San Diego, CA 92128
3rd Mon. Glendale Federal
Rancho Bernardo 3:00 p.m.

LA MESA GARDEN CLUB
Pres: May Pollock 444-4983
6325 Primrose Drive
La Mesa, CA 92042
3rd Thru 11 a.m., La Mesa Woman's Club
5220 Wilson Ave., La Mesa, CA

LAS JARDINERAS
Pres: Mrs. Robert C. Macon 223-0118
467 San Fernando Street
San Diego, CA 92106
3rd Mon. Home of Members 10:30 a.m.

LEISURE WORLD GARDEN CLUB
Pres: Mrs. Wayne F. Dyer (213) 596-4161
13171 St. Andrews Drive 154L
Seal Beach, CA 90740

OHARA SCHOOL OF IKEBANA
LA JOLLA CHAPTER
Pres: Mrs. Taimah Gaur 485-0116
13818 Tam O'Shanter Court
Poway, CA 92064

OHARA SCHOOL OF IKEBANA
SAN DIEGO
Pres: Mrs. Walter Bourland 276-4667
2936 Havasupai
San Diego, CA 92117

ORGANIC GARDEN CLUB, SAN DIEGO
Pres: Mr. John Miller 660-6756
10836 Calle Verde Dr., No. 153
La Mesa, CA 92041
3rd Fri., every two months starting Jan.
Casa del Prado, 7:30 p.m.

PACIFIC BEACH GARDEN CLUB
Pres: Michiko Munda 272-9727
1544 Oliver Ave., San Diego, CA 92109
2nd Mon. 1 p.m. Recreation Center
corner of Diamond and Gresham
Sept. through June

PALOMAR BANCH
AMERICAN BEGONIA SOCIETY
Pres: Ingeborg Foo (619) 724-4871
1050 Melrose Way, Vista, CA 92083
Quail Botanical Gardens, Ecke Bldg. 2nd Sun.
230 Quail Gardens Dr., Encinitas 2 p.m.

PALOMAR DISTRICT CACTUS AND
SUCCULENT SOCIETY
Pres: Mr. J. Reese Brown 434-7224
2711 Athens Ave., Carlsbad, CA 92008
4th Sat. Joslyn Senior Center
724 N. Broadway, Escondido 12:45 p.m.

PALOMAR DISTRICT
CALIFORNIA GARDEN CLUBS, INC.
 Pres: Mrs. James Valena 421-6504
 4112 Country Trails
 Bonita, CA 92002

PALOMAR ORCHID SOCIETY
 Pres: W.T. Mahoney 439-9399
 1565 Wilshire Road, Fallbrook, CA 92028
 2nd Fri. Vista Senior Citizens Ctr. 7:30 p.m.

POINT LOMA GARDEN CLUB
 Pres: Myrna Hines 222-2299
 935 Armada Terrace
 San Diego, CA 92106
 2nd Wed., Sept.-Jun., 3598 Talbot at Canon
 Westminster Presbyterian Church, 10 a.m.

**PROFESSIONAL WOMEN'S HORTICULTURE
 AND LANDSCAPE ASSOCIATION (PWHLA)**
 Pres: Sue McDevitt 488-5818
 Box 3424, San Diego, CA 92103
 4th Wed., Jan., Mar., May, Sep
 1st Wed. Nov.
 Call 753-1545 for further details

RANCHO SANTA FE GARDEN CLUB
 Pres: Mr. John Rainsford
 Hort. Ch: Corrine Gruenwald
 P.O. Box 1696
 Rancho Santa Fe, CA 92067
 2nd Tues., Rancho Santa Fe Garden Club
 Avenida de Acacias, Rancho Santa Fe
 7:30 p.m.

SAN CARLOS GARDEN CLUB
 Pres: Joan Bales Mitchell 583-6826
 7575 Conestoga Way
 San Diego, CA 92120
 4th Tues. Home of members, 9:30 a.m.

**SAN DIEGO ASSOCIATION OF
 PROFESSIONAL HORTICULTURISTS**
 Pres: Tineke Wilders 294-8097
 3511 Arizona Street
 San Diego, CA 92104
 4th Mon., Casa del Prado, Rm 104, 7:30 p.m.

SAN DIEGO BONSAI CLUB INC.
 Pres: Mr. Wayne Chapman 755-4451
 P.O. Box 40037
 San Diego, CA 92104, 11 a.m. Workshop
 2nd Sun., Casa del Prado, 1:00 p.m.

SAN DIEGO BOTANICAL GARDEN FOUNDATION
 Dr. Herbert A. Markowitz 224-8552
 876 Armada Terrace
 San Diego, CA 92106

SAN DIEGO BROMELIAD SOCIETY
 Pres: Tim O'Reilly 670-0830
 10942 Sunray Place,
 La Mesa, CA 92041
 1st Thurs., Byzantine Catholic Church
 2235 Galahad Road, Serra Mesa, 7:45 p.m.

**SAN DIEGO CACTUS AND
 SUCCULENT SOCIETY**
 Pres: Chuck Adams (619) 530-2551
 7305 Rock Canyon Drive, San Diego 92126
 2nd Sat. Casa del Prado, 1:30 p.m.

SAN DIEGO CAMELLIA SOCIETY
 Pres: Dean Turney 299-5418
 631 W. Pennsylvania Ave.
 San Diego, CA 92103
 3rd Wed., Casa del Prado, 7:30 p.m.

**SAN DIEGO COUNTY BRANCH
 NATIONAL FUCHSIA SOCIETY**
 Pres: Ted Garrett 753-2665
 498 La Costa Avenue
 Leucadia, CA 92024
 2nd Thurs., Palmquist School
 1999 California St., Oceanside 7:00 p.m.

SAN DIEGO COUNTY DAHLIA SOCIETY
 Pres: Mr. Gerald Lohmann 279-5135
 6616 Rockglen Ave., San Diego, CA 92111
 4th Tues. except Jul & Dec., Casa del Prado, 7:30 p.m.

SAN DIEGO COUNTY ORCHID SOCIETY
 Pres: Gene Hammond 426-6831
 1341 Park Drive
 Chula Vista, CA 92011
 1st Tues., Casa del Prado, 7:30 p.m.

SAN DIEGO EPIPHYLLUM SOCIETY
 Pres: Sean Minogue 475-4478
 808 Ethel Place
 National City, CA 92050
 2nd Wed., Casa del Prado, 7:30 p.m.

SAN DIEGO FERN SOCIETY
 Pres: Bob Halley 272-1019
 1714 Malden Street
 San Diego, CA 92109
 3rd Thurs., Casa del Prado, 7:30 p.m.

**SAN DIEGO FUCHSIA &
 SHADE PLANT SOCIETY**
 Pres: Bill Simpson 422-7055
 58 "I" Street
 Chula Vista, CA 92010
 2nd Mon., Casa del Prado, 7:30 p.m.

SAN DIEGO GERANIUM SOCIETY
 Pres: Barbara Jolly 424-5659
 1412 Tenth Street
 Imperial Beach, CA 92032
 2nd Tues., Casa del Prado, 7:30 p.m.

SAN DIEGO GESNERIAD SOCIETY
 Pres: Denise Knobloch (619) 268-0610
 3915 Argyle
 San Diego, CA 92111
 3rd Wed., St. David's Parish Hall
 5050 Milton St., 7:30 p.m.

**SAN DIEGO/IMPERIAL COUNTIES
 IRIS SOCIETY**
 Pres: Dorothy Driscoll 463-6700
 6338 Lake Athabaska Place
 San Diego, CA 92119

SAN DIEGO ROSE SOCIETY
 Pres: Mrs. Miriam Yoder 942-0557
 work - 295-2749
 2615 Levante St., Carlsbad, CA 92009
 3rd Mon. Oct thru Jun, Casa del Prado
 7:30 p.m.

**SAN MIGUEL BRANCH
 AMERICAN BEGONIA SOCIETY**
 Pres: Mrs. Toni Baker 582-7516
 6475 50th Street, San Diego, CA 92120
 1st Sat., Home of members 10 a.m.

SOGETSU SCHOOL OF IKEBANA
 Pres: Mrs. Leroy Lahey 429-6198
 2829 Flax Drive, San Diego, CA 92154

SOUTHWEST HEMEROCALLIS SOCIETY
 Pres: Paul Strauss 453-1998
 7887 Revelle Dr., La Jolla, CA 92037
 1st Sat., Feb., Apr., Jun., Sep., Nov.
 10 a.m. Quail Gardens Meeting Room
 Quail Gardens Rd., Encinitas

SOUTHWEST JUDGES' COUNCIL
 Pres: Mrs. David W. Hoke 436-9462
 335 Avenida de las Rosas
 Encinitas, CA 92024
 1st Wed., Casa del Prado, 10:00 a.m.

**SUN HARBOR BRANCH
 NATIONAL FUCHSIA SOCIETY**
 Pres: Robert Matlock 423-0213
 1333 New Chateau Drive
 San Diego, CA 92154
 4th Wed., Recreation Hall, Holy Trinity
 Church, 2083 Sunset Cliffs Blvd.,
 Ocean Beach

**THE HOYA SOCIETY
 INTERNATIONAL, INC.**
 c/o Christine M. Burton
 P.O. Box 54271
 Atlanta, GA 30308

**THE VILLAGE GARDEN CLUB
 OF LA JOLLA**
 Pres: Mrs. Harley Cope 546-9047
 8686 Cliffridge Ave., La Jolla, CA 92037
 4th Thurs., Sep thru May 1:00 p.m.
 La Jolla United Methodist Church
 6063 La Jolla Blvd., La Jolla

THE VISTA GARDEN CLUB
 Pres: Mrs. James McConnell
 1268 Waxwing Drive
 Vista, CA 92083-3045
 1st Fri., at 222 Jefferson St., Vista
 Senior Service Center, 12 noon

THE WATER LILY SOCIETY
 Pres: Norman Bennett
 (301-662-2230)
 c/o Charles B. Thomas, Sec.
 P.O. Box 106
 Buckeystown, MD 21717-0104

PROFESSIONAL AFFILIATES

ARTISTIC PRUNING
 Jim Stenert 298-7641
 1928 Madison Avenue
 San Diego, CA 92116

**CALIFORNIA HORTICULTURAL
 INSTITUTE**
 (714) 492-8968
 Post Office Box 457
 San Clemente, CA 92672

**ELLIS FARMS RETAIL NURSERY/
 FLORIST**
 P.O. Box 961
 1325 Borrego Valley Road
 Borrego Springs, CA 92004

LINDA A. FARRIER
 (619) 436-7092
 1435 Caudor Street
 Leucadia, CA 92024

FLOWERS BY SUZE B
 15919 Shalom Road
 Ramona, CA 92065-4820

GRIGSBY FAMILY LANDSCAPE
 Jim and Kathleen Grigsby
 461-7732
 7964 High St., La Mesa, CA 92041

**HORTICULTURIST, LECTURER,
 AUTHOR**
 Bettie L. Furuta
 (619) 723-8678
 2055 Rice Canyon Rd.
 Fallbrook, CA 92028

HOUSE OF BODE
 (916) 483-5977
 Mr. and Mrs. William T. Bode
 2800 Huntington Road
 Sacramento, CA 95864

LAWSON VALLEY NURSERY
 Clyde & Ann Wahl (619) 445-2934
 3616 Rudnick Dr., Jamul, CA 92035

MASTER LANDSCAPE SERVICES, INC.
 Robert Mayberry and Gary Rodriguez
 3089C Clairemont Drive, Suite 296
 San Diego, CA 92117 (619) 276-6016

SEAWOOD LANDSCAPING
 (619) 272-7603 / 270-0329
 4827 Lamont Street
 San Diego, CA 92109

STERLING TOURS
 Cheryl Hedgpath (619) 299-3010
 2707 Congress St., Suite 1 H
 San Diego, CA 92110

SUNSHINE GARDENING
 Ken Fernandes (619) 224-1930
 3021 McCall, San Diego, CA 92106



ENJOY YOUR HOBBY GREENHOUSE MORE!

Join the Hobby Greenhouse Association. For plant and flower growers in window and hobby greenhouses. Nonprofit. Receive Hobby Greenhouse Quarterly (sample copy \$2), Robins, Help/Advice Staff, Seed Exchange. \$10 U.S.A. (\$13 Canada, \$14 overseas, U.S. Funds). HGA, 8 Glen Terr., Bedford, MA 01730.

SINCE 1967

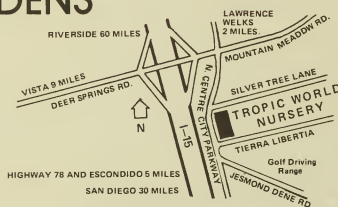
OPEN DAILY
9 A.M.—5 P.M.

TROPIC WORLD, INC.

NURSERY and GARDENS

26437 N. CENTRE CITY PARKWAY
ESCONDIDO, CA 92026
(619) 746-6108

- ROSES — 600 varieties
- FRUIT TREES, NUTS, BERRIES — 500 varieties
- SUCCULENTS, CACTI — 2000 varieties
- MUCH MORE



1989 FRUIT, NUT AND BERRY LISTING

(Includes number of varieties available)

Berries

- 5 Blackberry
- 1 Blackberry and/or Raspberry (hybrid)
- 1 Boysenberry
- 1 Dewberry
- 1 Loganberry
- 6 Raspberry
- 1 Youngberry
- 4 Blueberries
- 3 Currants
- 1 Gooseberry
- 5 Kiwi
- 4 Strawberries

Grapes

- 22 Table Grapes
- 7 Wine Grapes

Nut Trees

- 10 Almonds
- 4 Chestnuts
- 3 Filberts
- 4 Macadamias
- 10 Pecans
- 4 Pistachios
- 10 Walnuts

Deciduous Fruit Trees

- 27 Apples
- 13 Apricots
- 11 Cherry
- 3 Cherry Plum
- 1 Crabapple
- 19 Figs
- 2 Jujube
- 2 Mulberry
- 23 Nectarines
- 42 Peaches
- 1 Peachcot
- 15 Pears
- 20 Asian Pears
- 11 Persimmons
- 22 Plums
- 2 Plumcot
- 4 Prunes
- 4 Quince
- 4 Pomegranite

Evergreen/ Subtropical Fruit Trees

CITRUS

- 4 Grapefruits
- 2 Kumquat
- 3 Limes
- 1 Calamondin
- 5 Lemons
- 3 Limes
- 1 Limequat
- 6 Mandarins
- 8 Oranges
- 3 Oranges-Blood
- 1 Oranges-Sour
- 2 Pummelo
- 2 Tangelos
- Others citrus carried as available

- 12 Avocado
- 10 Bananas
- 5 Cherimoyas
- 10 Guavas
- 1 Kaffir Plum
- 3 Loquats
- 2 Papayas
- 1 Rose Apple
- 1 Sapote
- 4 Tropical Cherries

Miscellaneous

- 2 Cacti (hundreds of others)
- 3 Passion fruit
- 1 Carob
- 1 Kei apple
- 1 Olive

WITH THIS AD — 20% OFF

DECIDUOUS FRUIT TREES

(Does not include Fuyu Persimmons)

10% OFF BERRIES, NUTS & GRAPES

GOOD ONLY MONTHS OF JUNE & JULY, 1989

30 VARIETIES OF PERENNIAL DWARF DAHLIAS IN CONTAINERS THIS SUMMER.

For detailed listing ask for computer printout at the nursery (30¢) or send \$1.00 to have one mailed.